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HISTORY OF U-STEMS IN GREEK

A DISSERTATION

BURMITTED TO THE FACULTY OF THE GRADUATE SCHOOL OF ARTS
AND LITERATURE IN CANDIDACY FOR THE DEGREE
OF DOCTOR OF PHILOSOPHY

(DEPARTMENT OF SANSKRET AND INDO-EUROPEAN COMPARATIVE PHILOLOGY)

WILLIAM CYRUS GUNNERSON

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INTRODUCTION: U-STEMS IN THE OTHER INDO-EUROPEAN LANGUAGES

The evidence of the Indo-European languages points to the existence in the parent speech of two distinct types of u-stems:

I. Stems in which u interchanges with eu, ou, as in i-stems i interchanges with ei, oi. Thus nom. sg. -us, Skt. sūnūs, L. manus, Goth. sunus, Lith. sūnūs, O.B. synū—gen. sg. -eus, -ous, Skt. sūnōs, L. manūs (Osc. castrous), Goth. sunaus, Lith. sūnaūs, O.B. synu. These may be called simply u-stems.

II. Stems in which \bar{u} interchanges with $u\bar{u}$, as in $\bar{\imath}$ -stems $\bar{\imath}$ interchanges with $i\bar{\imath}$. Thus nom. sg. $-\bar{u}s$, Skt. bhrús, quagrús, tanús, Grk. òppûs, L. sūs, O.B. svekry—gen. sg. $-u\bar{u}os$, $-u\bar{u}es$, Skt. bhruvás, (Vedic) tanúas (tanvás), Grk. òppús, O.B. svekrůve. These may be called \bar{u} -stems.

It has been held by some (e. g., Bezzenberger, B.B. 7 [1883], 73; Joh. Schmidt, Plur. 54 ff.; Johansson, K.Z. 30 [1890], 408 ff., Gött. gel. Anz., 1890, 741 ff.; Kretschmer, K.Z. 31 [1891], 382, 449; Reichelt, B.B. 25 [1899], 240) that there is another I.E. type of u-stems in which there is interchange of \bar{u} with $u\bar{a}$, parallel to the interchange of \bar{i} ($i\bar{e}$) with $i\bar{a}$ ($i\bar{e}$) in the type represented by Skt. devi, bharanti, Grk. φέρουσα, etc. In considering the Sanskrit evidence, we may, with Lanman (Noun Inflection in the Veda), let A =the short i (or u) type, B the \bar{i} - $j\bar{a}$ - (devi) type, C the i- ii- (or uu-, nadie) type. In the Veda the types B and C of i-stems are distinct in eleven case-forms, while they agree in three. In classical Sanskrit both types have been merged, and their common declension follows Vedic B in eight out of the eleven cases where differences existed between B and C in Vedic. There are some few examples of this transfer in the Veda (Lanman, p. 373), and numerous examples of the transfer of A to B (67 forms from 27 stems). In seven of these eight cases the classical declension of u-stems differs in precisely the same manner from the Vedic type C, and a very few forms of this kind are also found in Vedic (Lanman, p. 404). It is on this ground that J. Schmidt assumes the existence of a type B of \bar{u} -stems, parallel to the type devi. But whereas in the case of i-stems, there is in Vedic, aside from all examples of transfer from A or C, a full declensional type B followed by a large class of words, there is no such independent type of \bar{u} -stems. The classical declension of \bar{u} -stems and the scattering forms of this type in the Veda may perfectly well be attributed to the direct analogy of type B of $\bar{\imath}$ -stems, as already explained by Lanman, p. 401. Add to this that at no period is there a nom. sg. in $-\bar{u}$ parallel to that in $-\bar{\imath}$, and there is every reason for abiding by the judgment of Lanman, Whitney, and others that there is no evidence in Sanskrit for a type of \bar{u} -stems parallel to that of *devi*. In fact the conditions in the Veda are so difficult to reconcile with the existence of such a type in the parent speech, that this can be admitted only on the most cogent evidence from the other languages.

But while the devi-type of $\bar{\imath}$ -stems is represented by important categories in other languages, especially the feminines of the present participle and other consonant stems in Greek, Germanic, and Balto-Slavic, the advocates of a corresponding type of \bar{u} -stems have brought forward only a few scattered forms, none of which is at all decisive. Most of these are from the Greek, where, since we have nom. sg. in $-\iota_a = \text{Skt. } -\bar{\imath}$, we should expect nom. sg. $-\epsilon_a$ for the corresponding \bar{u} -stems.

The principal example is πρέσβα, derived from *πρεσβεά (or *πρεσγεά) by Bezzenberger, B.B. 7 (1883), 73; Johansson, K.Z. 30 (1890, article written 1888), 403; J. Schmidt, Plur. 57 (1889, written about 1883); Kretschmer, K.Z. 31 (1891), 382, 449; Schulze, Q.E. 448 (1891); Reichelt, B.B. 25 (1899), 240, following Johansson. Neisser, B.B. 20 (1894), 52, gets πρέσβα from *πρεσβέρα. Grassmann, K.Z. 11 (1862), 24, took πρέσβα from * $\pi \rho \acute{e}\sigma \beta \iota a$. Misteli, K.Z. 17 (1868), 171, gave $\pi \rho \acute{e}\sigma \beta a$ as equal to * $\pi \rho e\sigma$ βέρια. Misteli's view, also held by some of the ancient grammarians (Etym. Mag. 687, 3; Bekker, A.G. 2, 391, 519), is out of the question. There is no phonetic difficulty in Grassmann's suggestion, but πρέσβα could come equally well from *πρεσβριά, and be thus counted a fem. to πρέσβυς of the type of Skt. āçví. J. Schmidt objects to this on the ground that Skt. adjectives with more than one consonant before the u have their fem. in -ū and not in -vī. But this is not universal in Sanskrit, where, e.g., phalgú- has both phalgú and phalgví as fem. (Whit. 344, b). And even if mainly true, it is obvious that the type -vi was of unrestricted application in Greek, since its representative -egua is the only type of fem. adj. known. He objects further that the form *πρεσβεια ought to have been displaced by *πρεσβεια as *āδρια = Skt. svādví was displaced by ήδεια, etc. But πρέσβα is found only in Homer, and there in a sense ("august" not "old") which shows that it was isolated from πρέσβυς, which is itself used only as a substantive and is indeed not used at all in Homer. There was no such feeling of relation as between ordinary adj. forms such as ibus and ibeia. Moreover, for an undoubted example of

¹For example, one of the chief advocates of the type (Johansson, K.Z. 30 [1890], 428) says: "Ausser 5- jd-stämmen sind von der klasse B nur spärlich reste und eigentlich nur im gr. bewahrt." And J. Schmidt, Plur. 75, says: "... ausserhalb des indischen und griechischen lassen sich die in letzterem am schärfsten auseinander gehalteten stämme"

- Fig. not replaced by - Exia, even where there was no isolation in meaning, cf. πολλή from *πολεια according to the explanation of Schulze, Q.E. 82, now universally accepted. Another example is πέλλα derived by Johansson from *πελεα, but this must rather come from *πέλεια as suggested by J. Schmidt, Plur. 48, footnote. So also from *πέλεια, Schulze, Q.E. 82 ff.; Brug., Gr. Gr. 45. Under no circumstances does λ_c give λλ. An example on which Johansson, 406, lays much stress is tyrus, Hom. lyrún beside lyris. He supposes that lyrva is the original form and that lyrin got its n from the oblique cases. Yet here the short final rests on the testimony of grammarians (e.g., Bekker, A.G. 1382), while lyvin is in good use. Johansson, 404, gives the Hom. fem. adjs. ωκέα, βαθέα and the regular Ionic $\beta \rho a \chi \epsilon a$, $\tau a \chi \epsilon a$, as from $-\epsilon \mu a$ ($-\bar{u}$), Grk. $-\epsilon_{\Gamma} a$, and not from $-\epsilon_{\Gamma} \mu a$. He has the same explanation for Péa beside Peia. But -ea for -e1a, though not so common as in Attic (Meisterhans³, 40, 12), is well known in Ionic, both from inscriptional and manuscript evidence (Hoffmann, G.D. 3, 528 ff.; Smyth, Ionic 197 ff.), and it is altogether unlikely that ωκά, etc., in spite of their antiquity, are anything different. (See below, p. 59.) J. Schmidt, Plur. 58, takes the Hom. acc. sg. fem. alπήν as the fem. to alπύς, for *al π av from *al π cav, with η from the gen., dat. sg. So also, p. 47, he takes Hom. ainá from *ainca a neuter pl. to ainús. Schulze, Q.E. 442, agrees with Schmidt on aiπά, but would read with Nauck πόλιν aiπύν for πόλιν αἰπήν. A neuter pl. alπά from *alπ_Fa, which does not prove the existence of a corresponding fem. form (see below, p. 8), may as an apparent o-stem form have given rise to $ai\pi \eta \nu$, if we retain this reading, but there is also the possibility that both are simply isolated forms of an inherited alπός beside alπός. ἄκανθα is said by J. Schmidt, p. 58, to be from *ἀκανθρα. So also Johansson, Gött. gel. Anz., 1890, 751. It may be an instance of the neuter pl. used as a fem. with Grk. -a from original -a; cf. dxav0os, d. Johansson, K.Z. 30 (1890), 424, did not put it under instances of -ca, though he was in doubt as to its explanation. The history of θ -suffixes in general is too obscure (cf. Brug., Gr. Gr. 204) to allow the use of ἀκανθα as evidence for the suffix. ἐάων is given by Schmidt, p. 58, as a gen. pl. of & with the same suffix that he assumes for $\pi \rho \epsilon \sigma \beta a$. The form is isolated as a fem., no other cases than the gen. pl. being found. It occurs a few times in Epic poetry, always in a substantive use, in the sense of "good things." The word evis eños is anomalous and the history of the form ¿áwr ¿áwr is involved in doubt. Cf. K.B. § 103, 9. Johansson, Gött. gel. Anz., 1890, 744, pronounces the example entirely uncertain. Schmidt gives expora (Hdn. 2. 87, 33) and αέρσαν· την δρόσον Κρήτες (Hesych.) as probably from *αςερσςαν, saying that expanse cannot be taken as equivalent. The short final rests on the testimony of Herodian and Hesychius, except that Pindar, Nem. 3, 78, has δέρσ' ἀμφέπει. The Thesaurus prints ἀέρσαν without comment, citing only Hesychius. Johansson, K.Z. 30 (1890), 418, takes this word with

short final as an s-stem with the suffix -a, which he sets up as the fem. formation for various stems. In Gött. gel. Anz., 1890, 744, he calls it an entirely uncertain example of the -ra suffix. Both Schmidt and Johansson assume the identity of the neuter pl. with the fem. sg. in the nominative, and bring into account forms like γοῦνα, δοῦρα, δάκρνα. The last may well be simply the regular plural of δάκρυον. In the case of γοῦνα and δούρα the -a is undoubtedly the same as the -a (Skt. -i, orig. -2) of consonant stems, no matter whether *yovça, etc., arose in Greek after the analogy of consonant stems, as assumed by Brugmann, Gr. Gr. 235, or whether they have simply retained an ending -us or -us in an uncontracted form in contrast to Sanskrit -ū. (Cf. Kretschmer, K.Z. 31 [1892], 382.) But of all the neuter plural endings, -2 is the one for which there is least proof of identity with a nom. sg. fem. And forms in -ca, even if inherited, no more prove the existence of a nom. sg. fem. in -ca, than do forms of n-stems in -va (Skt. -ni) prove the existence of a fem. type in -va, Skt. -ni, etc.

J. Schmidt, Plur. 46, 47, also considers adverbs like τάχα, ὧκα, λίγα, κάρτα as evidence for the suffix -ρα. These adverbs clearly must stand or fall together, and, as Schulze, Q.E. 82, points out, the form κάρτα cannot come from *κάρτρα, as shown by forms like τέσσαρες, ἄλωσον, σείω, σορός with σσ, σ from τρ. He takes such adverbs rather as closely connected with neuters like τάχος, κάρτος, *ὧκος (in ποδώκης), etc. Johansson, K.Z. 30 (1890), 407–409, attempts to show that ἐκυρά, ἀδελφή, οἰστά, ριτά, πτελία originally had the suffix -ρά. It should be evident that such words as these do not constitute evidence in favor of a suffix -ρά. In Johansson's review of Schmidt's Pluralbildungen, Gött. gel. Anz., 1890, 741 ff., the few additional examples cited are too uncertain to affect the result. He gives, for example, ala as a fem. to Skt. άγυ-, p. 751, and L. silva as a fem. to a u-stem *sulu-, p. 752.

Schmidt, Plur. 61-75, seeks to trace the type also in other languages than Greek and Sanskrit, but has no convincing examples. For instance, in Latin he gives anguilla to tyxelvs, lingua to O.B. języ-kū as examples of this suffix. These are also given independently by Johansson, K.Z. 30 (1890), 425. There is nothing to prevent taking these words, however, as original ā-stems. Here, as in the Greek, the possibility of deriving at least some of the examples given from a suffix -ça, if such a suffix were otherwise proved, is admitted, but in the absence of outside proof, the necessity of such derivation is denied.

With regard to the Proto-Indo-European conditions out of which the I.E. types I and II arose, see especially Hirt, Akzent, §§ 229 ff., 233 ff.; Kretschmer, K.Z. 31 (1892), 325 ff., especially 331 ff. Whatever their origin, it is obvious that the types as

given were fully established in the I.E. period, and form the only safe starting point for a historical study.

It is not intended to include in the scope of this dissertation the history of Greek diphthongal u-stems, like Zevs, Bovs, hows, and the large class in -eis. It is true that among the numerous explanations of nouns in -evs there are some which treat them as historically connected with the simple u-stems of Type I. Thus Kretschmer in his earlier explanation, K.Z. 31 (1892), 330 f. and 466, regarded the diphthongal stems as a second class of u-stems with the nom, and acc. sg. also in the strong grade, comparing Greek nouns in -evs with the O. Pers. dahyāuš, etc. is also the view of Bartholomae, Ar. Forsch. I, 34; Iran. Grd. I, 190, 1. In his later explanation, Zeitschrift f. öst. Gym. 53 (1902), 711 ff., Kretschmer suggests that the substantives in -€vs are partly derivatives from verbs in -εύω, partly (names of persons) original u-stems with vocative in -ev and nominative in -evs after the vocative. Reichelt, B.B. 25 (1899), 238 ff., thinks there was originally one type of u-stem with strong grade of suffix in nom. and loc. sg. as in n- and r-stems, and that in the parent speech, through differences in accent, there arose by leveling the two classes of diphthongal and simple u-stems. Other explanations do not connect so closely with simple u-stems. Brugmann, I.F. 9 (1898), 365 ff., holds that nouns like φορεύς arose from participles (verbal adjs.) in $-\eta - \rho(0)$ - which belonged to verbs in $-\epsilon \omega$. Ehrlich, K.Z. 38 (1902), 53 ff., considers the suffix -n_f- a combination of two elements: the lengthened final of a nominal o-stem ($i\pi\pi\eta$: $i\pi\pi o$ -) and the secondary suffix -ues- -uos- in its weakest form. But, whatever their true origin, they form a distinct class in Greek, the history of which is a subject by itself and need not necessarily be combined with the history of u-stems in the more limited sense.

I. U-STEMS

A. NOUNS

I. AS A DECLENSIONAL TYPE

The u-declension of nouns is preserved in Sanskrit, Avestan (in O. Pers. some forms of the plural are wanting), Greek, Latin (in Osc.-Umbr. some forms are wanting), Gothic, Lithuanian, and

Old Bulgarian, and to a certain extent in a more or less disguised form in Armenian and Celtic. It is largely preserved in Old Norse, and more limitedly, in words with short stem-syllable, in West Germanic. (Cf. Braune, Althochdeutsche Gram., § 228.)

II. TRANSFER OF U-STEMS TO OTHER DECLENSIONS

In Latin the identity of the nom. sg. of u- and o-stems led to the gradual transfer of u-stems to o-stems in Late Latin, and in the Romance languages this change has become complete. (Meyer-Lübke, 2, 4; Gröber, Grd. 1, 369.) An early example of this change in classical Latin is seen in domus.

So in O. Bulg. the identity of the nom., acc. sg., and acc. pl. of o- and u-stems led to the frequent transfer to o-stem forms in other case-endings (see Scholvin, Archiv f. slav. Phil. 2 [1877], 506 ff., for statistics), and in the modern Slavic languages the o- and u-stems are completely merged. See below, IV. (Oblak, Arch. f. sl. Phil. 13 [1891], 25; 11 [1888], 408.)

For Germanic no general statement can be made. In West Germanic u-stems with long stem-syllable lost their identity as u-stems and went over to other declensions, e. g., in O.H.G. mostly to the i-stems, but in part also to the o-stems, in O.E. mostly to the o-stems. Isolated instances of transfer to consonant stems perhaps occur. (Cf. Kluge, Paul's Grd. 1, 458.)

A partial transfer is that of ju-stems in Lithuanian, which have only jo-stem forms in the dual and plural, except that in the instr. pl. the ju-stem form sometimes occurs; jo-stem forms also appear in the nom. sg. dialectically, and in the acc. sg. in Old Lithuanian. Leskien (Nomina 327) gives as the reason the identity of form in several case-endings of the dual and plural of the jo- and ju-stems, and the parallelism of function between the suffixes -jo- and -ju-.

III. TRANSFER IN WHOLE OR IN PART TO U-STEMS OF WORDS BELONGING ORIGINALLY TO OTHER STEMS

Kluge (Paul's Grd. 1, 458) gives Goth. fotus, handus, tunpus, wintrus, O.N. orn, bjorn, O.E. duru, nosu as original consonant stems. The starting point for the transfer was given by the identity of the acc. sg., acc. pl., and dat. pl. of cons. stems and u-stems. But the special occasion was, in some at least, semasiological kin-

ship with inherited *u*-stems. (See Bloomfield, A.J.P. 12 [1891], 13.) Gothic *bropar*, dauhtar, swistar, fadar have the *u*-decl. in all cases of the plural except the genitive. Here sunus was no doubt a factor. Greek masculines in -os are declined as *u*-stems in the singular in Gothic, but in the plural mainly as *i*-stems.

IV. INSTANCES OF U-STEM FORMS WITHIN OTHER DECLENSIONS

The most striking example is in the Slavic. Even in O. Bulg. within the o-decl. u-stem forms were common, being found, beside the true o-stem forms, in all the cases where u- and o-stems differed, except the voc. sg., nom.-acc., and gen.-loc. dual. The most frequent (in their order) are: dat. sg. -ovi, gen. pl. -ovu, instr. sg. -umi, and nom. pl. -ove. (See Scholvin, Arch. f. sl. Phil. 2 [1877], 491 ff., for statistics.) In modern Slavic the o- and u-declensions are completely merged in a single type with various proportions of o-stem and u-stem forms in the several languages, but always with a strong admixture of the latter. Thus the u-stem form is well-nigh universal in the gen. pl. (Arch. 8 [1885], 239; 12 [1890], 33, 35 ff.), and is widespread in the dat. sg. (except in Slovenian, where it is rare, Oblak, Arch. 11 [1888], 524), and nom. pl. (Arch. 12 [1890], 14 f.; 8 [1885], 235). In the gen. and loc. sg. the u- and o-stem forms appear side by side in most Slavic languages, sometimes with a distinction in use between animate and inanimate objects. In Slovenian especially there has been an extension of the -ov- to the dat. and loc. pl. (Arch. 12 [1890], 368, 397; 8 [1885], 244). u-stem forms are also found to a much more limited extent in other stems than o-stems. The reason for the extension is to be sought in the clear and distinctive character of those u-stem endings which most prevailed. For example, the gen. pl. of o-stems was like the nom. sg. and it was natural that it should be displaced by the far more distinctive -ovŭ.

Lithuanian agent-nouns in -tojis (jo-stems) have u-stem voc. sg. in -au, and occasionally gen. sg. in -aus. Brolis, a jo-stem, has voc. brolau, probably after the analogy of sūnau (Brückner, Arch. f. Sl. Phil. 3 [1879], 255). So in O. Bulg. the voc. sg. of jo-stems is a u-stem form. Umbrian cons. stems have the u-stem endings in the dat.-abl. pl. (Buck, Osc.-Umbr. Gr. 126). Umbrian

Trebo, Fiso show a transfer from the o-stem to the u-stem form (Buck, loc. cit., 117). The loc. sg. of Skt. i-stems has the ending $-\bar{a}u$ apparently from the u-stems. (Cf. Meringer, B.B. 16 [1890], 224; Hirt, I.F. 1 [1892], 226; Bartholomae, I.F. 10 [1899], 12; Reichelt, B.B. 25 [1899], 244.) Compare Latin noctū after $di\bar{u}$ (Bartholomae, I.F. 10 [1899], 13).

V. SUFFIXES

Suffix1 -u- substantives.—This suffix forms nouns in all the eight I.E. branches, except, perhaps, Albanian. Its formations are not numerous in any language except Sanskrit, where there is a fairly large number. Less than twenty are cited for Lithuanian (Leskien, Nomina 239), still fewer for O. Bulg. (Scholvin, Arch. f. sl. Phil. 2 [1877], 508 f.; Leskien, Hdbch. 67), very few for Celtic (Stokes, B.B. 11 [1886], 76 f.), and in Latin and Gothic there is no considerable number. In Sanskrit the accent of neuters is regularly on the root-syllable, and the evidence of the Greek (γόνυ, δόρυ, etc.) shows that this was the I.E. accent for neuter u-stems. Masculines and feminines in Sanskrit are accented either on the root-syllable or suffix. The Lithuanian examples have prevailingly suffix accent. Gothic haidus (Skt. keta-), sidus point to suffix accent. All grades of the root are found. The formations are of all genders in Sanskrit, Avestan, and Latin, masculine in Germanic, Lithuanian, and Slavic. the last two all u-stem nouns of whatever suffix are masculine.) No specific meaning attaches to the suffix -u-, but its formations rarely, if ever, have the force of nomina actionis.

The only case where there seems to be any possibility of connecting the suffix with a distinct semasiological category is that of words for parts of the body. There is a considerable number of such, and possibly a partial "adaptation," such as noted in Gothic (see p. 10) is also to be recognized for the I.E. period. Examples are: Skt. jdnu-n. "knee," etc.; Skt. bāhū-m. f. "arm," etc.; Skt. hdnu-f. "chin," etc. (see below); Skt. sdnu-m.n. "back." Cf. also L. manus f.

¹ Here and elsewhere the term suffix is used without any implication that the formative elements so designated are in all cases really additions to the root. In some cases the same element appears in verb-forms, and may be regarded as a part of the root or base. But when such an element has once become productive it is impossible to draw any sharp line between forms in which it belongs to the root and those in which it does not. As a matter of fact in the great majority of words these elements, whatever their origin, are actually suffixes in the older sense of the term. But certain obvious cases like Skt. bhu-e are commonly designated as root-nouns.

Examples: Skt. dyu- n. "life," āyd- m. "living being," Av. āyu- n. "duration," Grk. alw, L. aevum, Goth. aiws "time;" Skt. janu- n. "knee," Av. zanva, pl. "knees," Grk. yovo, L. genū n., Goth. kniu n. "knee," Eng. knee; Skt. daru- n. "piece of wood," dru- n. "wood," Av. dauru- n. "piece of wood," dru- n. "wood," Grk. δόρυ n., O. Ir. daur n. "oak," Goth. triu n. "tree," Lith. dervà f. "resinous wood," O.B. drevo n. "tree;" Skt. paçun. paçu- m. "cattle," Av. pasu- m. "cattle," L. pecus pecu, Umbr. pequo "pecua," Goth. fathu n. "money," Eng. fee, O. Lith. pekus m. "cattle" (with k); Skt. bāhu- m. f. "arm," Av. bāzu- m. "arm" (nom. bāzāuš), Grk. πηχυς, O.H.G. buog "bend," O.N. bogr "bend;" Skt. madhu- n. (Ved.) "mead," (class.) "honey," Av. maδu- n. "honey," Grk. μέθυ n., O. Ir. mid n. "mead," O.H.G. meto "mead," Eng. mead, Lith. medùs m. "honey," O.B. medŭ m. "honey;" Skt. hanu- f. "chin," Grk. yevrs f., L. genu-īnus, O. Ir. giun m. "mouth," Goth. kinnus f. "chin," Eng. chin.

Suffix -tu- substantives.—This suffix, like -u-, appears in all the eight I.E. branches, except, perhaps, Albanian. It forms chiefly or perhaps entirely nomina actionis. The few words with the force of nomina agentis like Skt. mantu- "counsellor," Goth. hliftus "thief," no doubt originally had the force of nomina actionis. Compare Skt. mantu- "counsel" with the developed meaning seen in mantu- "counsellor." An important division of the nomina actionis in -tu- is that of the verbal abstracts (infinitives and supines). In Sanskrit the infinitives of this formation constitute the great mass of words with the suffix -tu-, being formed at will from any root. This is true of the supines in Latin, Lithuanian, and Slavic, and, in Celtic, infinitives formed with original suffix -tu- are not infrequent. In this use in verbal abstracts the suffix -tu- is not found in Iranian or Germanic. In the formation of substantives other than infinitives or supines,



¹ In the citation of examples no attempt is made to show the relative number of existing forms in the different languages. Preference is given to words with cognate w-stems in other languages, and to those whose derivation seems clear. Sanskrit and Avestan words are given in the stem form. The precise phonetic equivalence of words cited as cognates is not assumed.

²Brugmann, Grd. I², 555, and others cite an Av. sānw., but the only form extant is the acc. pl. sanva, Yt. 1, 27, which as a w-stem form would be isolated in Avestan (cf. Jackson, Av. Gr. § 268), but would be regular if from a wo-stem. Hence it is hardly safe to assign to Avestan the w-stem form sānw. Mod. Pers., however, has sāns "knee."

-tu- is used to form a fair number of words in Sanskrit, several in Avestan, a few in Celtic, less than half a dozen in Lithuanian (Leskien, Nomina 564), perhaps but one in O. Bulgarian, many in Latin, and many in Germanic, especially in extensions of the suffix -tu-. (See below.)

In Sanskrit the accent of infinitives, when simple, is on the root-syllable, and this holds good also for most of the other Sanskrit stems in -tu-. In Lithuanian the accent varies, but the material is too scanty to permit generalization. Lithuanian supines have the accent on the root-syllable. In Germanic, Gothic daubus, fribus, wulbus with others point to root accent, and the words in -obu- to accent not on the suffix, while Goth. flodus with others, and the words in -odu- point to suffix accent. Greek nouns in - rus are mainly oxytone. In Sanskrit the strong (guna) grade of root is regular, but the weak and strengthened grades appear (Whit., § 1161). Latin has both strong and weak grades (Stolz, Hist. Gr. 548). In Germanic, Goth. puhtus m. "conscience" to pugkjan, kustus m. "proof" to kiusan among others show a weak grade of root. The strong grade appears in leibu n. "cider," I.E. root lei. In Lithuanian supines the strong grade was original, but the weak has often entered through the influence of the infinitives (Wiedemann, Hdbch. 123). O. Bulgarian supines have the infinitive stem, and this varies, being both strong and weak. In Sanskrit the words are of all genders, but chiefly masculine, masculine in Latin, masculine in Gothic with perhaps a few exceptions, while in West Germanic there has been a movement to the feminine of other abstracts. nouns in -rus are fem. with one exception.

Examples: Skt. pitu- m. "food, drink," Av. pitu- m. "food," Grk. $\pi i \tau v$ s f. "pine," O. Ir. ith m. "grain," Lith. $p \bar{e} t \bar{u} s$ pl. "noon, midday meal;" Skt. $s \bar{u} t u$ - f. "birth, pregnancy," O. Ir. suth n. "fetus;" Av. $p \bar{e} s u$ - m. "ford," L. portus m., O.H.G. furt, "ford," Eng. ford; L. gustus m., Skt. $\sqrt{j} u$ s "enjoy," Goth. kustus m. "test, proof;" L. vultus m., Goth. wulpus m. "glory;" O. Ir. recht n. "right," O.N. rettr m. "right;" Goth. leibu n. "cider," Lith. lytus m. "rain," $\sqrt{l} e^{i}$ "pour."

In Latin the suffix is very productive, there being 99 sub-

stantives in -tus or -sus in Plautus, and nearly 700 in all writers up to the time of Hadrian. In the form -ātu- the suffix becomes productive in words denoting offices and official bodies, as consulātus, magistrātus, senātus, etc. (see Stolz, Hist. Gr. 548, and for -ātu- also Bloomfield, A.J.P. 12 [1891], 26). In Germanic the widest influence of the tu-suffix is seen in the form (Goth.) -assus, -inassus, (Eng.) -ness, starting from verbs in (Goth.) -atjan. (Cf. Grk. -áto.) This suffix is very frequent in Germanic, Old Norse alone being without it. Possibly in its later forms outside of Gothic other suffixes than -tu- played a part (Wilmanns, Deutsche Gr. 2, 355), but the Gothic forms show that at least in the beginning the suffix was a tu-suffix. (For the suffix as a whole see von Bahder, Verbalabstrakta 109 ff.)

Suffix -iu- substantives.—This forms nouns in Sanskrit, Iranian, Greek, Germanic, and Lithuanian. It is rare except in Lithuanian, where its numerous formations include primary nomina actionis and both primary and secondary nomina agentis. In Sanskrit and Avestan there are both nomina actionis and nomina agentis. In Sanskrit the accent varies, in Lithuanian it is never on the suffix. The gender is masculine in Sanskrit and Lithuanian, masc. and fem. in Avestan and Germanic. The suffix is clearly Indo-Iranian, and probably Indo-European, though there is no conclusive evidence for the latter.

Examples: Skt. dásyu- m. a demon, Av. dahyu- f. "country, nation," O.P. dahyu- f. (nom. dahyāuš) "province, district;" Skt. manyu- m. "mind," Av. mainyu- m. "spirit;" Skt. mṛtyu-m. "death," Av. mərəθyu- m. "death," perhaps Armen. marh mah "death," Hūbschmann, Armen. Gr. 472; Lith. gỹrius m. "renown," girti "celebrate;" Lith. stēgius m. "roofer," stegti "cover;" Lith. bāsius m. "barefooted one," bāsas "barefooted." For the numerous Lithuanian examples see Leskien, Nomina.

Suffix -nu- substantives.—This is rare in any language. It forms nouns in Sanskrit, Avestan, Greek, Latin, Celtic, Germanic, Lithuanian (one example), and Old Bulgarian. The gender varies. In Sanskrit the accent is usually on the ending (except neuters, which have root-accent), and the root has the weak grade as a rule. The Avestan suffix -snu- (Jackson, Av. Gr.,

§ 807) is simply an extension of -nu-, originating without doubt in words where s was part of the original stem.

Examples: Skt. dánu- n. "drop, dew," Av. dānu- n. "river;" Skt. dhenū- f. "cow," Av. daēnu- f. "cow," Skt. \sqrt{dhā} "suck;" Skt. bhānū- m. "light," Av. bānu- m. "light, ray;" Skt. sūnū- m. "son," Av. hunu- m, "son," Goth. sunus m. "son," Lith. sūnus m. "son," O.B. synū m. "son;" Goth. þaūrnus m. "thorn," O.B. trīnū m. "thorn," Skt. trna- m. "blade of grass." Latin examples are: sinus m., pinus f. (also o-stem), cornū n., and perhaps manus f.

Suffix -ru- substantives.—This is very rare in any language. It forms nouns in Sanskrit, Avestan, Greek, Germanic, and Lithuanian. It is doubtful in Latin (except in lacruma) and Old Bulgarian. Its forms are neuter in Sanskrit (except catru-"enemy") and Avestan, masculine in Germanic and Lithuanian.

Examples: Skt. dçru- n. "tear," Av. asru- "tear": Grk. δάκρυ n., L. lacruma dacruma; Skt. çátru- m. "enemy": Grk. κότος, but the suffix may be -tru- not -ru-.

In Latin the suffix is possibly seen in tonitrus, and is certain only in the extended lacru-ma. In Lithuanian (Leskien, Nomina 440) the suffix is perhaps only a variant beside -ra-. In Old Bulgarian Miklosich, 2, 53, gives darŭ "gift," and mirŭ "peace, world," but neither is given by Leskien, Hdbch. 67, or Scholvin, Arch. f. slav. Phil. 2 (1877), 508 f.

Suffix -gu- substantives.—This is apparently the suffix of Lithuanian žmogūs "man" (Leskien, Nomina 524), and with it has been compared the -γυ- in Cretan, πρεῖγυς, etc. (cf. Brug., Grd. 2, 261). Another possible example is Av. driγu- "poor," perhaps related to Skt. dtridra- m. "beggar, stroller," $\sqrt{dr\bar{a}}$ "run." Giles, Proc. Cambridge Phil. Soc. 25–27 (1891), 14 f., takes L. augur from au- (= avi-) and the same suffix as in πρέσ-βυ-ς, Skt. vanargu- "wandering in the forest," Lith. žmogūs; so also Stolz, Hist. Gr. 156. Otherwise Zimmermann, Rh.M. 55 (1900), 486.

Other, rare, suffixes containing u are: $-\bar{a}ku$ - (Skt., Whit., § 1181, d); -mu- (Av. $gar^{2}mu$ - m. "heat"); -su- (Skt., Lindner, Nominalbildung, § 97); -thu- (Skt. and Av., Whit. § 1164;

Jackson, Av. Gr., § 794); -tru- (Skt., Whit., § 1185, g); -vanu- (Skt., Whit., § 1170, c); Lith. -iszius-, -orius- borrowed from Slavic (Leskien, Nomina 599, 447); -szu- variant of -sza- in Lithuanian (Leskien, 598); -lu- only in Lithuanian (Leskien, 470).

B. ADJECTIVES

I. AS A DECLENSIONAL TYPE

The u-declension of adjectives is preserved in Sanskrit, Avestan, and Greek. Old Persian has one u-stem adjective with a few forms. Gothic has the nom. sg. masc. and fem. and the nom.-acc. neuter. The genitive is represented by filaus. Lithuanian u-stem adjectives have the u-stem forms always in the nom.-acc. sg., and nom. pl., but in the definite adjectives only in the nom.-acc. sg.

II. TRANSFER TO OTHER DECLENSIONS

In Latin the u-stem adjectives have gone over to the i-stems, Skt. tanu-, L. tenuis. A very few may have become o-stems, Skt. cdru-, L. $c\bar{a}rus$ (cf. Stolz, Hist. Gr. 456). The only relics of u-stem adjectives seem to be acu-, in acu-pedius (Festus), and $\bar{i}d\bar{u}s$. There are no u-stem adjectives in Oscan-Umbrian.

In Gothic all cases except those named above have gone over to the jo-stems. The transfer in Germanic outside of Gothic has also been in the main to the o-, jo-stems.

In Lithuanian, except in the cases named above, the jo-stem forms are used, save that in the instr. sg. (dialectically and in Old Lithuanian), gen. sg., and instr. pl., u-stem forms are also found. In the definite adjectives all cases except the nom.-acc. sg. are of the jo-stem form.

In Slavic *u*-stem adjectives have been transferred to the *o*-stems or have been extended by added suffixes.

III. TRANSFER IN WHOLE OR IN PART TO U-STEMS OF WORDS BELONGING ORIGINALLY TO OTHER STEMS

Brugmann, Grd. 2, 724, gives Skt. peru-m to perus "passing through," jigyubhis to jigyus "victorious," Av. jagāurūm to jagāurūs "watchful" as instances of transfer from the perfect active participle (weak stem -us) to u-stems.

In Lithuanian there is frequent transfer of o-stem adjectives to u-stems, the forms in -as and -us often appearing side by side in the same word.

IV. FORMATION OF THE FEMININE

The fem. of u-stem adjectives is formed in Sanskrit, Avestan, Greek, Germanic, and Lithuanian by the addition of the suffix $-i\bar{a}$. In Sanskrit, however, it could also be formed with \bar{u} by transfer to the \bar{u} -declension, and, less often, the same form was used for the fem. as for the masc. In Gothic also the nom. sg. fem. was always the same as the nom. sg. masc., while the other cases were formed with the \bar{i} -suffix. The use of $-\bar{i}$ is Indo-European, and it exerted great influence on the u-stems as a whole, being a chief factor in the complete transfer to i-stems in Latin, and in the partial transfer to jo-stem forms in the masc. and neuter in Lithuanian and Gothic.

V. SUFFIXES

Suffix -u- adjectives. - This forms adjectives in Sanskrit, Avestan, Old Persian (one example), Greek, Celtic, Germanic, and Lithuanian. They are numerous in Sanskrit, far outnumbering the substantives with u-suffix, much less common in Avestan, far more numerous in Greek than the substantives in -vs or -v not belonging to the -vs -vos type, infrequent in Celtic or Germanic, but very numerous in Lithuanian, here again far outnumbering the substantives with suffix -u-. The accent of adjectives in -u (of whatever u-suffix) was shown by Bezzenberger, B.B. 2 (1878), 123 ff., to have been originally on the suffix. His list of Vedic examples is about in the proportion of five to one in favor of this rule. He also cites a long list of Lithuanian adjectives that follow the rule and only a few that do not. Greek adjectives in -vs are regularly oxytone, there being less than half a dozen exceptions. Goth. hardus to Grk. kparús and O.H.G. durri, O.N. purr also point to accent on the suffix. Goth. pairsus as an exception is weakened by O.H.G. durri, etc. (cf. Kluge, Nom. Stammbildungslehre, § 182). The root appears in different grades, and there seems to be no special significance attaching to -u- as an adjective suffix. For the suffix in Sanskrit see especially Whitney, Skt. Gr., § 1178. In Lithuanian the suffix is primary and secondary. In the first use it has a general adjectival force, in the second it forms derivatives from substantives and has the force of L. -osus, Grk. -es, being especially frequent in this use (Leskien, Nomina 244 and 259).

Examples: Skt. āçā- "swift," Av. āsu- "swift," Grk. ἀκίς, L. ōcior, acu-pedium (Festus), perhaps accipiter for *acu-peter (Lindsay, L.L. 259; J. Schmidt, Plur. 174); Skt. urā- "wide," Av. vouru- "broad," Grk. εὐρίς; Skt. gurā- "heavy," Av. gouru- (in a compound) "opposing," Grk. βαρίς, Goth. kaūrus "heavy" (cf. Skt. agru- "unmarried," Av. aγru- "non gravida"); Skt. tanā- "thin," Grk. τανύ-γλωσσος, L. tenuis, O. Ir. tana, O.H.G. dunni, O.B. tinā-kū "thin;" Skt. tṛṣū- "eager, desirous," Goth. paūrsus "dry," O.H.G. durri "dry;" Skt. purā- "much," Av. pouru- "full," O.P. paru- "much," Grk. πολίς, O. Ir. il "much," Goth. filu n. "much;" Skt. pṛthā- "broad," Av. pərθu- "broad," Grk. πλατίς, Lith. platūs "broad;" Skt. raghā- "fleet, Grk. λαχίς, Av. rəvī- f. "the swift one;" Skt. svādā- "sweet," Grk. ηδίς, L. suāvis, Eng. sweet; Skt. vásu- "good," Av. vohu- "good," O.P. vahu- (in nomen propr. compound), O. Ir. fiu "worthy."

Suffix -tu- adjectives.—This forms a very few adjectives in Sanskrit, as dhātu- "drinkable," tapyatu- "glowing, hot" (Whit., § 1161). It is probable that these are transfers to u-stems of -ata forms (pacata, etc., Whit., § 1176, e). So in Lithuanian the suffixes -tu-, -stu-, -sztu- appear along with -ta-, -sta-, -szta-in the formation of a few adjectives (Leskien, Nomina 556-59). The suffix in Lithuanian is no doubt simply a by-form of -ta-, and in no sense an inherited suffix.

Suffix -iu- adjectives.—This forms a few adjectives in Sanskrit (see Whitney, $\S 1165, b$). For "secondary yu" in forming adjectives from nominal and pronominal stems see Whitney, $\S 1178, h, i$. In this use it generally has the force of "desiring or seeking after," and is fairly common.

In Lithuanian, adjectives in -iu- are very doubtful (Leskien, Nomina 326). It may be said that outside of Sanskrit the suffix -iu- does not form adjectives.

Suffix -nu- adjectives.—This forms a very few adjectives in Sanskrit, in the forms -nu- and -anu- (Whit., $\S 1162, b, c$), a very few in Avestan, and a few in Lithuanian, which, however, are closely associated with those in -na- (Leskien, 355 ff.). The

suffix -snu- found in Sanskrit is an extension of the suffix -nu-, originating no doubt in words where s was part of the stem. Cf. Whitney, § 1194. So also Skt. -tnu-, Whit., § 1196.

Examples: Skt. grdhnu- "hasty," \sqrt{grdh} "be eager;" Skt. tapnu- "burning," \sqrt{tap} "warm;" Av. $z\bar{o}i\bar{s}nu$ - "unclean," Bartholomae, Z.D.M.G. 50 (1896), 689; Jackson, A.J.P. 12 (1891), 68.

Suffix -ru- adjectives.—This apparently forms a few adjectives in Sanskrit, and one or two in Avestan, but in the absence of cognates from other languages it cannot be determined whether the suffix is -ru- or -lu-. No certain examples of ru-adjectives are found in Germanic (Kluge, Nominalstammbildungslehre 94, 197). In Lithuanian the suffix forms a fair number of adjectives. These outnumber those in -ra-, with which they are closely associated (Leskien, Nomina 440 ff.).

Examples: Skt. pataru-"flying," 1/pat "fly;" Skt. vandaru"praising," Av. vandru- "desiring," Skt. 1/vand "greet;" Lith.
gaidrus, gēdrus, and gēdras "bright, clear" (of weather): φαιδρός.

Suffix -lu- adjectives.—This forms a few adjectives in Sanskrit and Greek, one or two in Germanic, and a small number in Lithuanian, where they outnumber those in -la-.

Examples: Skt. $dh\bar{a}r\dot{u}$ - "sucking," Grk. $\theta\hat{\eta}\lambda\nu$ s, Skt. $\sqrt{dh\bar{a}}$ "suck;" Skt. $bh\bar{i}r\dot{u}$ - "timid," Lith. $bail\dot{u}s$ "fearful;" Kluge (Nom. 193) cites only Goth. aglus "heavy" as certain. For Lithuanian see Leskien, Nomina 468. For Skt. $-\bar{a}lu$ - see Whitney, § 1227, b.

Other, rare, suffixes containing u are: $-\bar{a}ku$ - (Skt., Whit., § 1181, d); -ku- in Lith. (Leskien, 507); -mu- in Skt. $st\bar{a}mu$ - "thundering" to \sqrt{stan} "thunder" (Lindner, Altindische Stammbildung, § 75; Wackernagel, Ai. Gr. 14); -su- in Skt. according to Lindner, § 97, but doubtful. In Lith. -su- forms a few adjectives, but is merely a by-form of -sa-. (Cf. Leskien, 597.)

II. Ü-STEMS

A. NOUNS

I. AS A DECLENSIONAL TYPE

The \bar{u} -declension is preserved in Sanskrit, Avestan, Greek, and Old Bulgarian. Latin has it only in the root-nouns $s\bar{u}s$ and $gr\bar{u}s$.

These have the acc. sg. suem, gruem like Grk. $\dot{o}\phi\rho\dot{\nu}a$, etc., and in the nom. pl. the *i*-stem ending $-\bar{e}s$, not differing in this respect from other stems in Latin which follow the cons. declension. The dat.-abl. pl. $s\bar{u}bus$ is the \bar{u} -stem form, while suibus, gruibus are after the *i*-stems. Leskien, Nomina 241 ff., sees the type also in four Lettic feminines, pluralia tantum.

Some of the forms are clearly root-stems in which the u is a part of the root, e. g., L. $s\bar{u}s$, etc., but the type is not limited to such, as shown by Skt. $cvacr\hat{u}$, O.B. svekry, etc. Nouns in \bar{u} are all feminine except a very few somewhat doubtful masculines in Sanskrit, and a masculine or two in Greek. In Sanskrit they are all oxytone (Whitney, 355, c), and in Greek the accent is on the ultima almost without exception.

II. TRANSFER TO OTHER STEMS

In Latin it would seem from socrus that \bar{u} -stems (other than root-stems) became u-stems. The shortening before the m in the acc. sg. socr $\bar{u}m$ would make that form identical with the acc. sg. of short u-stems, and leveling probably caused the transfer of the remaining cases. In the modern Slavic languages \bar{u} -stems have been lost, going over mainly to the \bar{a} -stems. Isolated instances of transfer elsewhere are: Goth. swathro ($\bar{o}n$ -stem), O.B. *kry kr $\bar{u}v\bar{v}i$ (i-stem), Lith. $zuv\bar{v}s$ (i-stem).

Examples: Skt. cvaçrū- "mother-in-law," O.B. svekry, L. socrus (ŭ-stem), Goth. swathrō, with same meaning; Skt. tanū-f. "body," Av. tanū-f. "body;" Skt. nṛtū- m. "dancer," nṛtyati "dance;" O.B. liuby f. "love," L. lubet, etc.; O.B. čēly f. "healing, cure," Goth. hails "well," Eng. hale, whole; Skt. bhū-f. "earth," Skt. 1/bhū "become;" Skt. bhrū- "brow," Grk. ὀφρῦς, Lith. bruvis "brow," Eng. brow; Skt. vadhū-¹ f. "bride," Lith. vedù, O.B. vedą "I lead." For further examples see Whitney, Skt. Gr. 355, c.

B. ADJECTIVES

Sanskrit alone has the \bar{u} -declension of adjectives. Here the suffix $-\bar{u}$ - is used in forming feminines to masculine adjectives in $-\bar{u}$. They constitute the bulk of Sanskrit \bar{u} -stems.

 1 Uhlenbeck, ai. etym. Wörterbuch, s. v. vadhūs, cites Av. vašu-, wnich I have not been able to find.

No other form of \bar{u} -suffix than the simple $-\bar{u}$ - seems to appear. (For Grk. $-r\bar{v}$ - see p. 46). Evidence for \bar{u} -stems from other derivative suffixes is scanty. The suffix -uko-, which forms a few adjectives in Sanskrit and Latin and a noun or two in Greek and Old Bulgarian (Brug., Grd. 2, 256; Whit., § 1180 f.), probably arose by the addition of the suffix -ko-to a \bar{u} -stem. So the suffix $-t\bar{u}ti$ -, which forms a few nouns in Latin, Celtic, and Gothic, as well as the Latin $-t\bar{u}d\bar{o}$ -, may point to a suffix $-t\bar{u}$ -(Cf. Pokrowskij, KZ. 35 [1899], 247; Kretschmer, K.Z. 31 [1892], 333).

U-STEMS IN GREEK

A. NOUNS

I. NOUNS IN -vs -v, GEN. -eos (ATTIC -eos), REPRESENTING THE ORIGINAL TYPE I (SHORT U-STEMS)

The stem-suffix appears in the three forms -v, $-\epsilon_F$, and -r. The last two are followed by the case-endings of the consonant stems. In its declension of this type, Greek differs from the related languages chiefly in its extension of the strong form $-\epsilon_F$ to cases which have the weak form in other languages. The form -r, that is, -u, is confined to certain cases of viv, $\gamma \delta vv$, and $\delta \delta \rho v$. As normal representatives of the declension of this type may be taken $\delta \pi \hat{\eta} \chi v s$ and $\tau \delta \tilde{\sigma} \sigma v$.

The nom. sg. in -vs and -v is parallel to the forms in related languages and calls for no remark.

In all dialects except Attic, so far as there is any evidence, the gen. sg. has -cos from -cf-os. Greek stands alone in this form, Skt. -os, Goth. -aus, Lith. -aus pointing to an I.E. gen. -eus or -ous for u-stems. The Attic -cos is explained as due to the influence of moleus from Homeric molapos by change of quantity, this with η after the loc. (dat.) sg. $\pi \delta \lambda \eta i$. (So, for example, Brug., Gr. Gr. 224). It is possible that the -éws of nouns in -evs had a share in making -cos the regular Attic gen. for u-stems. form acrees occurs without exception on Attic inscriptions, e. g., C.I.A. 2, 584 (318-307 B. C.), C.I.A. 2, 379 (229 B. C.), etc., (\tilde{a}] $\sigma \tau \epsilon \sigma s$, Ditt. 541, 5, of 421 B. C. in Attic alphabet = $\tilde{a} \sigma \tau \epsilon \sigma s$). Phrynichus (Lobeck, 245; Rutherford, 318) wrongly gives the gen. sg. as πήχεος (cf. K.B., § 126, anm. 7), but Photius, 429, 7, p. 316, bids us say $\pi \eta \chi \epsilon \omega s$ not $\pi \eta \chi c \omega s$. Etym. Mag. 687, 11, gives πρέσβεως, πήχεως, πελέκεως as Attic, citing πρέσβυος apparently as non-Attic. The usage of later Atticists was not always in accordance with the evidence of the inscriptions, Philostratus and Strabo, for example, having forms in -cos (Schmid, Atticismus IV, 20, 586, III, 25). In Aesch. Suppl. 490 at the close of an iambic line, most MSS. read acress. In Soph. O.R. 762, also at the end of a line, horews is read. But Euripides has undoubted instances where the long vowel is demanded, e.g., El. 246, Ph. 842. (K.B., § 126, anm. 2). The non-Attic literary dialects, Epic, Ionic, Doric, show the gen. sg. - ϵ os. Æolic happens not to have the gen. sg., but has other forms of the same declension. The evidence from inscriptions is scanty but decisive for the - ϵ os form, e. g., Bœotian $[\epsilon]$ dorios S.G.D.I. 491, 3 = C.I.G.S. 3170, 3, with ϵ for ϵ before a vowel; cf. Bœotian θ iós; Cretan vi ϵ os, L.G. VI, 3.

The dat. sg. is a loc. sg. in origin and has $-\epsilon i$ (- $\epsilon \iota$) from $-\epsilon \rho - \iota$, parallel to Vedic -avi in sūnávi.

The acc. sg. has -vv -v, parallel to the forms in related languages, I.E. -um -u. For viéa, etc., see below under viús.

The voc. sg. in -v has a parallel in Goth. -u, Av. -u, but Skt. -o, Lith. $a\tilde{u}$, O.B. -u show forms going back to I.E. -eu or -ou.

The nom. pl. in -ees (-eis) from -e_F-es shows the normal form parallel to Skt. -avas, etc. The uncontracted form -ees seems to have prevailed everywhere except in Attic. For the literary evidence see K.B., § 127. The only inscriptional forms are: Æolic πρέσβεες, S.G.D.I. 281, A33 (333 B. C.); Acragas πρέσβεες, S.G.D.I. 4254, 11; Cretan viées, L.G. VII, 25, 22; Delphian πρέσ]βεις, S.G.D.I. 2506, 37 (277 B. C.), probably the κοινή form. There is no inscriptional evidence for adjectives, so far as I have noted.

The gen. pl. in -εων from -ερ-ων is, like the gen. sg., an example of the extension of the strong form of the suffix to weak cases. Herodian I, 428, gives πήχεων and πελέκεων as Attic. Photius 316 says πήχεων not πηχῶν, as also πήχεων not πήχους. C.I.A. II add. 834, C. 15 (324 B. C.) has πήχεων bis. The contracted form πηχῶν is late (cf. K.B., § 126, anm. 7). A Pergamene inscription of the time of Trajan shows πηχῶν.

The dat. pl. in -εσι is a loc. pl. in origin, but with -εσι instead of -υσι after the analogy of the nom.-gen. pl. (so Brugmann, Gr. Gr. 237). Homer has πελέκεσσι (also Corinna) with the ending which is so widespread in the third declension, especially in the Æolic dialects, and is usually explained as an extension from s-stems (Brug., Gr. Gr. §§ 271 and 273, 1; G. Meyer, Gr. Gr. ,

§ 376; Smyth, Ionic 378; otherwise, K.B., § 118, 10, anm. 9, and Wackernagel, I.F. 14 [1903], 373-375).

In the acc. pl. Cretan alone shows the original ending -uvs, L.G. IV, 40, vivis (cf. Goth. sununs). Schulze, Com. Phil. Gryph. (1887) 17, holds that Homer had an acc. pl. in -vs from -υνς. In Homer πολέος, πολέες, πολέων are found forty-two times, never suffering contraction or synizesis except in two instances, in one of which emendation is easy, while in the other the line is considered spurious. This being true of the gen. sg. and nom.gen. pl., it is surprising that in eighteen occurrences of the acc. pl. of $\pi \circ \lambda \circ s$ no less than eight must be read as dissyllables. This dissyllabic form appears in the MSS. sometimes as moleas (Il. 1, 559; Il. 2, 4; Od. 3, 262), sometimes as πολείς (Il. 15, 66, etc.), and sometimes with variation between the two. It is unlikely that ea would contract more readily than eo or ee. Homer does not have the nom. pl. moreis, and Schulze first pointed out that it is unlikely that a nom. form -es would be employed as an acc. before it was in use as a nom. We are not justified in assuming that mode contracted while modes did not, nor that modes is to be taken as the correct form of the dissyllabic accusatives, and as a nom. pl. form used in the accusative.

Schulze therefore concluded that Homer used a form in -v̄s from -v̄s. This view is borne out by the evidence of the related languages and by Cretan viv̄s, as well as by the reading πολῦς ascribed to Zenodotus by the scholiast on Il. 2, 4, and now accepted by Fick and Christ. Against this view may be urged the direct statement of the scholiast (loc. cit.) that the acc. pl. in -v̄s is confined to nouns in -v̄s -vōs, and the fact that the sole traditional support for -v̄s is this reading of Zenodotus.

Wackernagel, I.F. 14 (1903), 369 f., seeks to show that the acc. pl. forms in -ενs are from -ενs, which has displaced the original -υνν under the influence of other cases with ε, just as -εσι arose for -υσι in the dat. pl. (Brugmann, Kurze Gr. 392, accepts Wackernagel's view as probable.) His theory has the advantage of retaining the form -εις, which has traditional support, but the weight of this is lessened by the fact that -εις can perfectly well be due to the Attic form familiar to the editor, while -υς in short ν-stems

would get no such support. On the other hand it is reasonably certain that the gen. sg. $-\epsilon \rho \sigma s$ for $-\epsilon \nu s$ or $-\rho \sigma s$ and the gen. pl. $-\epsilon \rho \sigma \nu s$ for $-\rho \sigma \nu s$ arose in proethnic Greek, probably also the dat. pl. $-\epsilon \sigma \iota s$ (unfortunately here the Cretan has only the analogical $\nu i d\sigma \iota$), yet these left the accusative forms unaffected, as the $-\nu \nu$ of all dialects and the Cretan $\nu i \dot{\nu} s$ show. The $-\epsilon \nu s$ could not therefore belong to this stratum, and the later dialectic encroachment of $\epsilon \rho s$ in the accusative forms was accompanied by the consonantal endings, i. e., $-\epsilon(\rho)a$, $-\epsilon(\rho)as$. A dialectic substitution of $-\epsilon \nu s$ for $-\nu \nu s$ is only a degree more plausible than would be an acc. sg. $-\epsilon \nu s$ for $-\nu \nu s$.

So far as the Attic accusative in -es is concerned, there is no question of priority to forbid its being a nominative form used as an accusative, for, as far as we know, Attic had nom. pl. -es from the earliest historical period. There are parallels to this usage elsewhere, e. g., the nom. pl. of the Latin fourth declension in -ūs is best taken as an accusative form (so Lindsay, L.L. 398; Brug., Kurze Gr. 391), and the "contracted" nom. pl. of the -vs, -vos declension is an accusative form (Brug., Gr. Gr. 266), and the fact that Attic does not have -es for -as (see Wackernagel) is not a serious objection.

The forms in -eas in use in Homer and Herodotus are further examples of the extension of the strong form of the suffix -e_F- and the consequent adding of the consonant ending -e_S.

The nom.-acc. pl. neuter in -εa, from -ερ-a, has the a of the cons. stems (see above, p. 8). The Attic -η is after the analogy of the s-stems, Wackernagel, K.Z. 25 (1881), 272. Pindar, Nem. 10, 5, has ἄστη, Bacchylides 13, 155, ἄστεα. C.I.G. Ins. I, 3, 202 (metrical, third or fourth century B. C.) has ἄστεα. The peculiar form aἴστεα occurs B.C.H. 24 (1900), 71, in a metrical inscription from Bœotia of the third century B. C. For the ε see Solmsen, Rh.M. 58 (1903), 614.

The dual nom.-acc. in $-\epsilon\epsilon$ (Attic $-\epsilon\iota$) from $-\epsilon_F - \epsilon$, has the usual $-\epsilon$ of the Greek nom.-acc. dual. On this $-\epsilon$ see Brug., Gr. Gr. 231; Kretschmer, K.Z. 31 (1892), 381; J. Schmidt, K.Z. 27 (1885), 292. Herodian II, 324, says that the nominative of the dual in the orators is $\tau \hat{\omega}$ $\pi \rho \hat{\epsilon} \sigma \beta \eta$, from $\pi \rho \hat{\epsilon} \sigma \beta \nu s$, $\pi \rho \hat{\epsilon} \sigma \beta \epsilon \sigma s$, but that the form $\pi \rho \epsilon \sigma \beta \hat{\eta}$ in Aristophanes (Fr. 495, Dd.) is from

πρεσβεύς, τοῦ πρεσβέος. The dual τὼ πρέσβει occurs on an inscription of Carpathus, Ditt. 69, 45 and 56 = C.I.G. Ins. I, 977 (fourth century B.C.), ω and η are on the stone, but ϵ is used for ϵ . So the Attic viεῖ (written hue) occurs on an inscription, C.I.A. iv, 418, 9 (before 418 B. C.). Kirchhoff transcribes viη, but of. Meisterhans, footnote, 1205.

The dual gen.-dat. -éow from -ef-ow has the usual ending added to the strong form of the suffix. For the -ow see Brug., Gr. Gr. 3 232, with the literature cited.

So far as there is any evidence, it has been shown that the type -vs -v, -cos extends throughout the dialects. This is in striking contrast to the *i*-stems, which, outside of Attic-Ionic, and in Ionic also in large measure, have the declension of the \bar{i} -ii-stems, gen. -cos, nom. pl. -ces. Most short u-stems have gone over to the declension of the long \bar{u} -stems in Greek, but in the few substantives where the short u-declension has been preserved it is found not merely in Attic or Attic-Ionic, but also in other dialects.

The only nouns in Greek declined according to this type are: ή ἔγχελυς, ὁ πέλεκυς, ὁ πῆχυς, ὁ πρέσβυς, ὁ υἰύς, and the neuters ἄστυ, πῶῦ, σῶρυ, and perhaps μίσυ. Like these are declined the adjective compounds with πέλεκυς, πῆχυς, or πρέσβυς as final member. See below, p. 62. Wackernagel, K.Z. 25 (1881), 272, assumes a form *δευδρυ- to account for δένδρη, etc., but there seems to be no reason why these should not be from δένδρος as usually taken. For γόνυ and δόρυ, which belong more closely with this type than with any other, but which do not conform to it as a whole, see below, pp. 35 f. Homer has a pl. κώεα, κώεσι from which Schmidt, editor of Hesychius, s. υ. κυνύπισμα, infers a sg. κῶῦ like πῶῦ to pl. πώεα, but the sg. κώας is found in Homer, and from this the κώεα is usually taken.

έγχελυς varies in declension, having forms of the -υς -υος type, especially in the plural. Homer has only the pl. ἐγχέλυες. Archilochus has ἐγχέλυας. According to Tryphon in Athenæus 7, 299, chap. 54, Attic declined the singular like πῆχυς -εως, but the plural like nouns in -υς -υος. So also Ælius Dionys. ap. Eustath. 1231, 35 = ed. Schwabe 72 and 150, 15. Aristophanes has ἐγχέλευς, ἐγχέλεων, and ἐγχέλεσν. According to Bonitz'

Index, Aristotle uses the nom. sg. ἔγχελως, the gen. sg. ἐγχέλως and ἐγχέλως, nom. pl. ἐγχέλως, ἐγχέλως, ἐγχέλως (once v. l. -ιδες), gen. pl. -ύων, -ίων, -έων, dat. pl. -υσι, -εσι. The grammarians are inclined to take the forms ἐγχέλως ἐγχέλων from a nom. sg. ἔγχελως. So Bekker, A.G. 1366. For the usage in other writers see especially Thesaurus, s. v., and also K.B., § 126, anm. 3, 441.

πέλεκυς has the dat. pl. πελέκυσι in Ælian H.A. xvii, 44, but in xiv, 29 the regular πελέκεσι. Hesychius, s. v. Στειλέη has πελέκυσι (cf. Lobeck, Phryn. 246).

The grammarians mention forms in -υος from πρέσβυς and take the gen. πρέσβως from πρέσβις. So Etym. Mag. 687, 11, πρέσβις. ἀπὸ τοῦ πρέσβις πρέσβιος, πρέσβεες πρέσβεις κλίνεται τὸ πρέσβυς πρέσβυς καὶ πρέσβεως 'Αττικῶς καὶ ἔστι τρίτον μετὰ τῶν πήχεως καὶ πελέκεως σεσημειωμένων. Chœroboscus 234, 23 = Bekker, A.G. 1413 = Gram. Græci, iv, 1, 233, 6, says the feminine is ἡ πρέσβυς τῆς πρέσβυς and the masculine in Doric is πρέσγυς πρέσγυος, and that πρέσβις πρέσβεως means "ambassador," while πρέσβυς means γέρων. Cf. also schol. Arist. Ach. 93. Chœroboscus ap. Hdn. ii, 707, cites a voc. πρέσβις and an acc. πρέσβιν.

The gen. sg. of vive is given as viéos not viéos. See below, p. 32.

Of the neuters, aoru is the only one in frequent use.

πῶυ is found only in Homer and Hesiod, in Homer only in the forms πῶυ, πώεα, πώεσι, in Hesiod only πώεα. The grammarian in Cramer, Anecd. Ox. 3, 255, says τὸ πῶῦ is declined like μέθυ, πῶυ πώυος πώυ, and that the poet (Homer) made the pl. πώεα from another sg. πώας just as he had κώας and pl. κώεα.

The word $\sigma \hat{\omega} \rho \nu$ has the gen. $\sigma \hat{\omega} \rho \epsilon \omega s$ in Diosc. 5, 119, and in the Hippiatrica (an anonymous work of the Middle Ages on medicine), but Pliny 34, 29, has soryos. The Thesaurus says the genitive should be corrected to $\sigma \hat{\omega} \rho \nu o s$ (which Pliny has), or the nominative should be taken as $\sigma \hat{\omega} \rho \iota$. The gen. soreos is found in Celsus 6, 9. $\sigma \hat{\omega} \rho \iota$ is found in Democritus. Galen has the word frequently, but always in the form $\sigma \hat{\omega} \rho \nu$.

L. and S. s. v., and K.B., § 126, give $\mu l \sigma v$ as belonging to the same declension as $\tilde{a} \sigma \tau v$, though also with the gen. -vos. The

Thesaurus does not give the genitive in -cos at all, but thinks on the basis of the Latin use of the word that it may have been used as an indeclinable, when not declined in -v -vos. None of the references in L. and S. or in the Thesaurus, so far as I know, has the genitive in -ews, and K.B. give no references. Lobeck, Phryn. 288, in commenting on σίνηπι σινήπεως and σίναπυ σινάπυος says: "sic τοῦ βράθυος Jul. Afric. Cest. 16, 294. τοῦ μίσυος et τοῦ μίσεως apud materiae medicae scriptores, itemque σέρεως et σώρεως." In his index Lobeck gives the reference to places under plat not plav. Certain it is that such words (mostly of foreign origin) for plants, metals, and medicines were greatly confused among the late writers. So Phrynichus, loc. cit. supra, tells us not to say σίναπι, but νάπυ, and the declension varied as given above. At any rate, the gen. μίσυος is by far the most frequent, if that in -εως occurs at all. I have found the form in -vos in the following: Diosc. 5, 117; Celsus 5, 19, § 8; Galen (ed. Kühn), Vol. XIX, p. 736 bis; Hippocrates (ed. Littré) vi, 422, in two MSS., others having μύσιος, vii, 354, with no v. l., vii, 414, § 98, one MS. having $\mu l\sigma v$, viii, 170, § 76, with no v. l.

In modern Greek no distinction exists between the declensions of original short u-stems and original long \bar{u} -stems, both having been merged with stems the vowel of whose final syllable, η or ι , had become identical in pronunciation with v. See Hatzidakis, Neugr. Gram. 380; Jannaris, Hist. Grk. Gr., §§ 389, 390, 398, 399; Thumb, Neugr. Volkssprache 36, § 70, 2.

viús.¹ Exclusive of the o-stem forms, viús presents the following: Nom. sg.: viús Lac. S.G.D.I. 4402 = Cauer 4 = I.G.A. 54, the only example of the stem viú- in Laconian (Boisacq, Dial. Dor. 145), Cretan L.G. ix, 40, viús mistake for viús L.G. xii, 17; vihús Attic vase, Klein, Gr. Vasen 72 = C.I.G. 8202, and vihs Klein, 72 = C.I.G. 8203, mistake for vihús; viús, Attic, C.I.A. iv,

¹ Miller, Mélanges (1868) 291; Baunack, Curt. Stud. 10 (1878), 88 f.; Nauck, Mélanges (1875-1880) iv, 102; Hārtel, Zeitsch. f. Ost. G. 27 (1876), 628; Wackernagel, K.Z. 25 (1881), 291; Osthoff, M.U. iv (1881), 185 adn. 2; Bergk, Poetae Melici (1882) 534; Baunack, Inschr. v. Gort. (1885); Schulze, Com. Phil. Gryph. 20 ff. (1887); Kretschmer, K.Z. 29 (1888), 470 f., Vasen Inschr. 187 (1894); Allen, Papers of Am. School at Athens iv (1883), 71 f.; Delbrück, Die Indogerm. Verwandtschaftsnamen 455 (1889); Kühner-Blass, Gr. Gr. (1890) 138; La Roche, Beiträge zur gr. Gram. 1 (1893), 222 ff., especially valuable for review of forms, Homerische Unters. 46; Brugmann, Grd. 2, 299 f., I² 182, 270 f., Gr. Gr.³, §§14, 29, 183; Meisterhans, Att. Inschr.³ 144 (1900); Herwerden, Lexicon suppl. et dial. s. v. (1902); Ehrlich, K.Z. 38 (1902), 89. In the following pages on viús the abbreviation loc. cit. will refer to the works here cited.

1, b, 373, 107, metrical sixth century B. C. (C.I.A. i, 398, is usually taken as metrical, and if so seems to have the first syllable short, Usener, altgr. Versbau 30. But cf. Baunack, Inschr. v. Gort. 71; Allen, loc. cit., 55, 71; Ehrlich, loc. cit., who read it vis as one long syllable. Meisterhans, loc. cit., suggests that it may be a prose inscription); vs Attic, C.I.A. iv, 1, b, 373, 94, metrical sixth century B. C.; vis hypothetical form, a figment of the grammarian, Etym. Mag. 553, 15; cf. 775, 20; vis or vis attributed to Simonides, see Bergk, loc. cit., Miller, loc. cit.

Gen. sg.: vlos Homer. Whether Thessalian HYIO≤ of the Sotairos inscription belongs here (hvîos) or is to be understood as hvios, gen. sg. of vis, is still uncertain. See Solmsen, Inscr. Graecae ad inlustr. Dialectos sel. 21, footnote 10, with literature cited; viéos Homer, Cretan, L.G. vi, 3, Attic MSS., see La Roche, loc. cit., 223; véos Attic, C.I.A. ii, 1513 (400–350 B. C.); viéos called pseudattic by Phrynichus (Lobeck, 68; Ruth. 141), see La Roche, loc. cit., 223; viños Attic metrical, time of Empire, C.I.A. iii, 914, 1.

Dat. sg.: vi Homer, Hesiod; vićī Homer, Hesiod; vićî Homeric doubtful (see K.B., § 435), Argive, S.G.D.I. 3297, 2, prose, time of Empire, Attic, S.G.D.I. 1597, 4, from Dodona, but in Attic dialect, stone has NIEI, Attic MSS., La Roche, loc. cit., 224, Elatea, metrical, third or fourth century B. C. in B.C.H. 10 (1886), 367; viŋı late Epic.

Acc. sg.: viv Arcad. S.G.D.I. 1183, Cretan, L.G. vi, 12, x, 15; via Homer, Ænianian, S.G.D.I. 1438, 6, metrical, Locrian, S.G.D.I. 1500, time of Ætolian League, Bithynian, B.C.H. 24 (1900), 381, 8, metrical, third century B. C., Thasos, Chios, etc., metrical inscriptions; viéa Homer, only II. 13, 350, various later poets, see La Roche, loc. cit., 223, C.I.G. Ins. i, 3, 819, metrical, second century B. C., Inschr. v. Olymp., footnote 184, third century B. C., Rev. Ét. Grecq. 15 (1902), 331, metrical from Pontus, B.C.H. 24 (1900), 381, 16, metrical from Bithynia, third century B. C., same inscription has via, Phrynichus (Lobeck 68) and Thomas Magister, 367, disapprove the form, though Dio Chrys. uses it, i, 261, 28 (Schmid, Attic. i, 86); viña late Epic (Nicander Frag. 110).

Nom. pl.: vies Homer; viées Homer, Hesiod, Pindar Is. 7, 25, Cretan, L.G. vii, 25, 22; vieis Homer, Od. 15, 248, 24, 497 (here viées Nauck), Hesiod Frag. 70, 3 (130 K), 136 (68 K) (viées Nauck), Attic MSS., La Roche, loc. cit., 224; veis Attic, C.I.A. i, 61, 14 (409 B. C.), Corpus (Köhler) transcribes viis, Meisterhans, loc. cit., veis; viis late Epic.

Voc. pl.: vieis Homer, Il. 5, 464 (vies Nauck).

Gen. pl.: νίῶν Homer (Plato, Demosthenes, Pindar, Quintus of Smyrna; see La Roche, loc. cit., 225). This form could, of course, belong either with vies or νίοί, but is preferably taken with vies. Cf. Wackernagel, loc. cit., 290, who makes νίςῶν parallel to Av. pasvām; νίέων Pindar, Attic MSS., La Roche, loc. cit., 225, Protagoras, Smyth, Ionic 398; νίήων, Anth. Pal. viii, 118, 5.

Dat. pl.: vidor Homer, Cretan, L.G. iv, 37, Soph. Antig. 571, v. l. vidor; vidor Attic MSS., La Roche, loc. cit., 225; vidor prose inscription from Syracuse, Inscr. Sic. et It. 10 = S.G.D.I. 3235, where Blass reads $(\tau)\epsilon(\lambda\epsilon)\sigma\iota$; viheooiv late Epic, La Roche, loc. cit., 226.

Acc. pl.: viivs Cretan, L.G. iv, 40, Argive, J.H.S. 13 (1892–93), 128, n. 61, on a fragment from the Acropolis (Meyer, Gr. Gr. 461); vias Homer; vieis Attic C.I.A. iii, 167, 5 (143 A. D.), archaizing incription, Attic MSS., La Roche, loc. cit., 225; veis Attic, C.I.A., ii, 51, 11, 19, 27, 30 (369 B. C.) = Ditt. 89, C.I.A. ii, add. i, b, 37, 893 = Ditt. 57, YE ≤ (403 B. C.); viéas Homer, Hesiod, Herodotus, C.I.G. Ins. i, 3, 1189, 4, metrical; viñas late Epic.

Nom.-acc. dual: vie Homer, Hesiod; viée Attic MSS., La Roche, loc. cit., 224; viεî Attic, C.I.A. iv, 418, 9 (before 418 B. C.), stone HYIE. Kirchhoff transcribes viη, but cf. Meisterhans, footnote 1205.

Of the nom. sg. forms given, vis is a fiction of the grammarian, and vis attributed to Simonides by the Florentine Etym. Mag. is rejected by Herodian. The other forms are from the u-stem proper.

In the gen. sg. vlos is without doubt from *viços parallel to

The analogy of other words and other languages points to the accent viór vií in the
gen.-dat. sg. as suggested by Wackernagel, loc. cit., 290. Schulse adopts Wackernagel's

γουνός δουρός, from *γουρός *δορρός. The forms viéoς, ύνος are like πήχεος. The form viéως is branded as pseudattic by Phrynichus, and Thomas Magister, 367 (ed. Ritschl), bids us write viéoς with an omicron. Further Etym. Mag. 775, 20 says the Athenians wrote viéoς with o not ω. The evidence of Attic inscriptions is confined to one example, C.I.A. ii, 1513, with viéoς. The date is fixed between 400 and 350 B. C., so that it would have had viéως, had this been the Attic form. The spelling viéως is, however, fairly frequent in the MSS. of Attic writers (cf. Lobeck, Phryn. 68 ff.). viῆος is a late metrical form developed no doubt through confusion with nouns in -ευς.

Of the other forms cited all agree with the corresponding forms of the regular declension as given above except the following:

(1) Forms with the suffix grade -f- and the consonantal endings, like the gen. vlos, discussed above; dat. sg. vlu, acc. sg. vla, nom. pl. vles, gen. pl. viων (see above under forms), acc. pl. vlas, nom.-acc. dual vle.

Kühner-Blass, § 138, 507, give the dat. pl. νίάσι as parallel to the gen. sg. νίος, nom. pl. νίες, etc. (so also La Roche, loc. cit., 223), but in that case the dat. pl. πήχεσι should be explained in the same way. The form νίάσι has been explained from the time of Eustathius (1348, 27) to the present (Wackernagel, K.Z. 25 [1881], 289; Bloomfield, A.J.P. 12 [1891], 24; Kretschmer, K.Z. 29 [1888], 470) as having its a from the analogy of other nouns of relationship πατράσι, etc. νίάσι is for νίέσι, and this for *νίνσι as explained above under the dat. pl. Kühner-Blass, § 118, 417, miss the point of the syllabic liquid in πατράσι, etc.

- (2) A series of late epic forms made mainly after the analogy of nouns in -ευς, like the gen. sg. υίῆος cited above; dat. sg. υίῆε, acc. sg. υίῆα, nom. pl. υίῆες, dat. pl. υίῆεσσιν, acc. pl. υίῆας (cf. La Roche, loc. cit., 225 f.).
- (3) The acc. sg. viéa, an extension of the strong grade -ερ-with the consequent use of consonantal -a. Homer has such a form also in the acc. sg. of the adjective, e. g., εὐρέα πόντον. The acc. pl. viύνς has been sufficiently discussed above under the acc. pl.

suggestion and writes viós, vií. Cf. Danielsson, Eranos 1 (1896), 139, footnote. But it is hard to get around the direct statement of Herodian ii, 614, 36, that the gen. vlos is properispomenon, though he is, to be sure, in error in regarding it as from a nom. vlos (not extant). Cf. Etym. Mag. 775, 20. It would seem that the coexistence of a nom. viós and gen. viós would prove so confusing as to lead to a difference in accent for the sake of distinctness.

In Homer the o-stem forms, nom. sg. viós, acc. sg. vióv, voc. sg. vié, are frequent. The gen. sg. vioù occurs once, Od. 22, 238, the dat. pl. violot once, Od. 19, 418, while viols, Il. 5, 159, is universally rejected as a false reading. K.-B. give υἰων as from the stem vio-, but this is an unnecessary assumption; see above under forms. The passages with vioù and vioiot are suspected of being late additions, cf. Schulze, loc. cit., 25. If these are set aside we have left in Homer only the nom., acc., and voc. sg. of the o-stem, these having in distinction from other forms of vivs the initial syllable as syllaba anceps. Even these are rejected by Nauck, loc. cit. Cf. also Hartel, loc. cit. Judging from Homeric conditions just expressed, o-stem forms were substituted for u-stem forms in just those cases which have viv.. This can hardly be accidental, though a purely phonetic dissimilation (Osthoff, loc. cit.) is altogether unlikely. The evidence of inscriptions, especially Cretan and Attic, makes it plain that the u-stem form of the word was earlier than the o-stem. Meisterhans 144; Schulze, loc. cit., 25; Kretschmer, K.Z. 29 [1888], 471; Baunack, Inschr. v. Gort. 71; otherwise Ehrlich, loc. cit., 90.) Just how the o-stem form arose is not determined. Schulze, loc. cit., takes the gen. pl. viôv as the starting-point since this form has the appearance of a gen. pl. to viós. (For an ancient view see Etym. Mag. 775, 20 and 553, 15.) In Attic the o-stem form completely displaced the u-stem form by about 350 B. C.

The suffix is clearly -iu-, and the root the same as in Skt. sūnū-, etc., p. 16. The only question is as to the precise form of the root. Kretschmer, Vaseninschriften 187, suggested that vivs was from *συρ-ιύ-s, and Ehrlich, loc. cit., gives an elaborate explanation of all the case-forms on the basis of nom. *suuius, gen. *suuius. But such a formation as *suu-i-u- is in itself improbable, and it is safe to assert that no one will accept it, unless it is impossible to derive the Greek form from a *sū-iu- or *su-iu-. But this is not the case. How the forms can be derived from *suiu- has been shown, in the main convincingly, by Schulze, loc. cit., 20 ff. He rightly assumes (since ι between v and a following vowel was lost in all dialects but Lesbian) that, e. g., nom. sg.

*su-iu-s became ivs, while gen. sg. *su-iu-os became vifos viós (for accent see above, p. 31, footnote), nom. pl. *su-ieues became vifes, viés, while gen. pl. *su-iu-ōm became vifûv, viûv. He accounts for the extant forms of the developed paradigm by assuming leveling, strong forms passing, e. g., from the nom. pl. to the gen. sg. and, vice versa, weak forms entering strong cases as vies in nom. pl., while the u strictly belonging by phonetic development to the gen.-dat. sg., etc., displaced the v- of the nom.-acc. sg., etc., so that viús, viúv, arose beside gen. sg. vios, etc. For such forms as gen. sg. viós we must assume not only the influence of strong forms like nom. pl. viées as given by Schulze, but also, as I think, that of the regular endings -cos -cu of the ordinary u-stems.

Brugmann still holds (Gr. Gr. § 14; Kurze Gr. 92) that ι after ν and before a vowel is regularly preserved. But $\nu i \nu i$ would be the only example of the retention of an original intervocalic ι , except in Lesbian, and Schulze's explanation of the $\nu \iota$ - in $\nu i \nu i$ as due to leveling from cases where $\nu \iota$ - came before $-\iota$ - is much to be preferred.

On the assumption that vivs owes its to restoration, Schulze explains the short initial syllable of Homeric nom. sg. vids, acc. sg. vióv, voc. sg. vié by supposing that these forms stand in the place of original Homeric viús, viúv, viú, and that the latter have retained the quantity of the still earlier vus, vu, vu from su-iu-s, etc. At any rate, it is clear that the situation is different in vivs, with no consonant after the vi-, from that in vios, vicos (cf. Brug., Gr. Gr., § 14). On the other hand, Attic has $\overline{v(\iota)}$ /s, nom. sg. (Allen, loc. cit., 71) from a form with restored & and secondary loss, like -va from -via in the participle (Meisterhans, 59). Leaving out of account the question of quantity, the belief that such forms as viv's owe their to the analogy of other cases receives confirmation from the situation in Attic, where, when the forms of the cons. decl. vios, etc., were no longer in use, the i did drop out just as we should have expected it to do earlier, had it not been for the "Systemzwang" of the other forms.

Inasmuch as -iu- is not found as the suffix for this word in any other language, and is rare anywhere, the view of Bezzenberger cited with

approval by Delbrück, loc. cit., is not without attractiveness. It is that viv's vio's was a "Koseform" to *iνν's like μαῖα to μήτηρ and Lith. sēja to sesii "sister." There are no parallels, so far as I know, for such shortforms with suffix -iu-, but the suffix -io- is fairly frequent in Greek in "Kosenamen." Cf. Fick-Bechtel², 24 f.

In what precedes there has been no attempt to explain why viis should have forms in - ϵ - with consonant endings, while other u-stems (except $\gamma \delta \nu \nu$ and $\delta \delta \rho \nu$) should not. Wackernagel, loc. cit., 290, suggests that gen. pl. $v i_{\ell} \hat{\omega} \nu$ (cf. Av. $p a s v \bar{a} m$, etc.) kept its form against the encroachment of $\epsilon \nu$ through its similarity to $\pi a \tau \rho \hat{\omega} \nu$, and that after $\theta \nu \gamma a \tau \rho \delta s$, etc., were formed $v i_{\ell} \delta s$, $v i_{\ell} i$, etc. Weight is added to this view by the fact that $v i d \sigma s$ is plainly after $\pi a \tau \rho d \sigma s$, etc.

γόνν and δόρν.¹ Homer has the gen. sg. γουνός, δουρός from *γονςός *δορςός like the gen. sg. νίος. That this gen. sg. in -μος is an I.E. type (beside -eus) is apparent from Vedic paçνάς, Av. χταθνό, and the Greek forms. It is entirely distinct from the gen. in -υμος as in γέννος, which is properly the ending of ū-stems. Cf. Kretschmer, K.Z. 31 (1892), 465; Brugmann, Grd. 2, 577. The form δορός of Attic tragedy represents the Attic development of *δορςός. Beside *δορςός arose *δόρςατος under the influence of the extensive neuter type in -a, -ατος (originally n-stem; see Brug., Gr. Gr. § 212, 3, 4), whence δούρατος and δόρατος according to the dialectic treatment of -ρς-, -νς-. In the same way arose γούνατος and γόνατος. Herodian, ii, 940, 15, cites also a gen. sg. δόρεος.

Other forms which show the suffix grade -ρ- are: nom.-acc. pl. Æolic γόννα, γόνα, Hom. γοῦνα, Hom. δοῦρα; Hom. dual nom.-acc. δοῦρε; gen. pl. γόνων for γόννων Æolic (Sappho 44), Hom. δούρων; dat. sg. Hom., Pindar δουρί, Pindar, Tragedy δορί; the last form is also used in prose in military expressions.

The dat. sg. δόρει in the Tragedians, and the nom.-acc. pl. δόρη in Eurip. Rhes. 274 are forms of the ἄστυ declension. Cf. the gen. δόρεος given by Herodian.

Inscriptional forms are: gen. sg. δόρατος Argive (Epidaurus), S.G.D.I. 3340 (third century B. C.) = Ditt. 803, 64, δόρατ[ος] Delphian, S.G.D.I. 2501, 30 (380 B. C.) = Cauer 204, 30, δορός

For a citation of forms see K.B., § 130, 457 f.

Thebes, metrical, C.I.G.S. 4247; dat. sg. δόρατι Kern, Inschr. v. Magn. 105, 106, δόρατι Late Cretan, Ditt.² 929, 134 = Mus. Ital. iii, 570, n. 3, δόρατι Ditt.² 368, 10 = Inscr. Cos 223, n. 345, δόρατι Ætolian, Ditt.² 333, 3 = S.G.D.I. 1418, δορί Locrian, metrical, S.G.D.I. 1501; gen. pl. γονάτων Epidaurus, S.G.D.I. 3340, 111 = Ditt.² 803, 111 (third century B. C.?); dat. pl. γονάτεστι Kaibel Ep. Gr. 782, δοράτεστιν Βωστίαη, metrical, B.C.H. 24 (1900), 70.

For a list of cognates see above, p. 13. For further etymological connections with δόρυ see H. L. Ahrens, "δρῦς und seine Sippe" (1866), and especially Osthoff, Etymologische Parerga (1901) 100 ff., who embodies Ahrens' suggestions with many additions. He arranges the material under eight stem-forms: (1) *deru-*deru-, (2) *doru-*doru-, (3) *dreu-, (4) *drou-, (5) *druu-, (6) *drū-, (7) *dru-, (8) *drū- or *drū-.

For the Ablaut relation between Skt. dāru-jānu- and Grk. δόρυ γόνυ, etc., see Brug., Grd. i, 70 f., ii, 1205, note, i², 139, and xliii, Kurze Gr. 74, 75, with literature cited in last two. Cf. also Meringer, Sitzungsber. d. kais. Akad. d. Wiss. (Wien, 1892), bd. 125, 2, 21 ff.; J. Schmidt, K.Z. 32 (1893), 338; Hirt, Akz. 220, Ablaut 522, 772.

II. NOUNS IN -Us -u, GEN. -vos

This class includes (1) nouns belonging to Type II (long \bar{u} -stems), (2) nouns in - \check{v} s, - \check{v} , belonging originally to Type I (short u-stems).

Exclusive of the small number of hypocoristics (see below, p. 64), and the nouns given under I above, all *u*-stem nouns in Greek, so far as their declension can be determined, belong to Class II.

There are about two hundred and forty Greek nouns with nom. in -v or -v, which belong, so far as there is any evidence, to this declension. As a matter of fact only about seventy or eighty of the two hundred and forty present enough forms to determine the declension. For the remainder the evidence is simply negative. About one hundred of the two hundred and forty have the suffix -tu- and are mostly feminine oxytones with long final. See the suffix -tu- below. Of the remaining one hundred and forty about half are known only from glosses, mainly in Hesychius, and hence as a rule these furnish no evidence for declension,

gender, or quantity of the final syllable. In the matter of accent the ratio of barytones to oxytones is about two to one, for these glosses. The figures given do not include proper names, for which no complete list was attempted, but of which about fifty examples were noted. So far as the proper nouns show any declension at all, it is that of Class II.

The remaining seventy, i. e., excluding those known only from glosses, and those with suffix -tu-, furnish evidence for declension in about forty instances, about half determine the quantity of the final syllable, and all but half a dozen determine the gender. About forty-five of the seventy are barytones, almost equally divided into masculines, feminines, and neuters. The remaining twenty-five are oxytones and perispomena, and are all feminine except $\delta i\chi\theta\hat{v}s$, $\delta \mu\hat{v}s$ (an original s-stem), δ (but also δ) $\sigma\hat{v}s$. The perispomenon $\tau\delta \gamma\rho\hat{v}$ has the gen. sg. $\tau\sigma\hat{v}$ $\gamma\rho\hat{v}$ in Lucian, Lexiphanes c. 19, and hence may be classed as an indeclinable.

Of the twenty-five oxytones and perispomena about fifteen furnish evidence for quantity, either from the usage of the poets or the statements of grammarians. In no instance is the quantity shown to be short only, most have the long final, while a few show the syllable as both short and long. These are: $i\chi\theta\tilde{\nu}\nu$ Hdn. i, 416; $i\sigma\chi\tilde{\nu}\nu$ Pindar Nem. 11, 31; $\nu\eta\delta\tilde{\nu}\nu$ Hdn. i, 527, Callim., Dian. 160, Bœotian metrical inscription C.I.G.S. 2544 and 2545. $\nu\eta\delta\tilde{\nu}s$ has long final in Anth. Pal. 9, 519, 2 and elsewhere. Homer has it in nom.-acc. sg., but only at end of line.

On the other hand of the forty-five barytones, only about fifteen furnish evidence for quantity. Here the final is usually short, but there are some cases of variation. In no instance is it long only. (The cry Κόκκῦ, being indeclinable, does not constitute an exception.) Examples of variation are: γένῦν Eurip. El. 1215, but γένῦς Phoen. 63, γένῦ Andr. 1181; νέκῦς Il. 4, 492, 18, 180, etc., but νέκῦς Eurip. Suppl. 70, etc., metrical inscription from Mysia B.C.H. 25 (1901), 327, νέκῦν Boeotian, C.I.G.S. 2544; χέλῦς Hom. Hymn Merc. 33, 153, 242, χέλῦς Callim. Hymn Apoll. 16, Oppian 5, 404, Aratus 268; στάχῦς Eurip. H. Fur. 5, elsewhere στάχῦς; βότρῦς, μακρῶς Αττικοί, βραχέως

It must be understood that all numbers are approximate.

"Ελληνες, Moiris, 193, 10, quoted by Kretschmer, K.Z. 31 (1892), 336, βότρὖν metrical inscription C.I.G. Ins. i, 1, 781.

Exclusive of glosses and proper names, there are about one hundred and fifteen oxytones (ninety of these being nouns in -705), mainly feminine, and with long final, presumably belonging to Class II, and about fifty-five barytones, of all genders, and with short final, also belonging, so far as there is any evidence, to this It seems, therefore, safe to assert that the connection between accent and vowel-quantity is too marked to be accidental, and must reflect in some measure I.E. conditions. above, p. 21, \bar{u} -stems were prevailingly oxytone, while the u-type was probably originally barytone in the nom.-acc. sg. relation in Greek, to be sure, may have become more uniform than it actually was in Indo-European. In general oxytones in -ūs are based on I.E. Type II, and barytones in -vs on I.E. Type I, with a transfer to Type II in the cases other than the nom.-acc. sg., yet the forms in -vs are disproportionately frequent, as compared with \bar{u} -stems elsewhere, and must be due in part also to transfer from Type I. The reason why the transfer in Greek of Type I to Type II arose, or why, since it did become so general, the few examples of Type I were retained at all, is yet to be found. It is worthy of remark that of the small number given under I only υίψς, ἄστυ, and γόνυ do not have byforms of the -υς -υος declension either in actual use or in the statements of the grammarians. For the general problem of the ultimate origin of the two types and the relation of accent to quantity see the references on p. 8.

The nom. sg. ends in $-\bar{\nu}s$, $-\check{\nu}s$, masc. or fem., $-\check{\nu}$, neuter. The acc. sg. has correspondingly $-\bar{\nu}\nu$, $-\check{\nu}\nu$, $-\check{\nu}$. (The forms with short vowel properly belong to Class I.)

Besides the more usual acc. sg. in -ὖν is found that in -να from -νν-m, as in Skt. bhrνναm, L. suem, or -να may simply be a new formation after the acc. pl. in -νας (Brug., Grd. 2, 550, Gr. Gr.³, § 254; Kretschmer, K.Z. 31 [1892], 466). Such are: ἰχθύα, Theocr. 21, 45 and 26, 17, τρικτύα· τριάδα (Heysch.), οἰζύα, Quint. Smyrna, νηδύα, ὀφρύα, δρύα cited by Hdn. ii, 763 as rare forms, βότρνα ascribed to Euphorion by Chœroboscus 235, 20 ff. = Gram. Graeci iv, 1, 234, 1 = Hdn. ii, 711, 6.

The gen. sg. ends in -vos from -uuos, alike from nominatives in -v̄s, v̄s, and v̄, and for all dialects so far as there is evidence. So δρυός Ditt. 588, 7, 100, Delos (180 B. C.); Κόρθυος nomen propr., Late Cretan, Mus. Ital. iii, 648, n. 61 = B.C.H. 13 (1889), 57; Κότυος nomen propr., J.H.S. 22 (1902), 128, Cyzicus; τῆς νός Ditt. 615, 14, Myconos (third century B. C.); Πόλυος nomen propr., S.G.D.I. 2580, Fg. D. 174, Delphian; Βίθυος nomen propr., Thess., Hoffmann G.D. ii, 543, n. 18, 6; Γέρυς or nomen propr., Cyprian, Meister G.D. ii, 269, Hoff. i, 246. The ending -vos properly has the ν short as in other cases before a vowel, but rare instances of -v̄oς occur, as δρύός Hes. Op. 436, λλύος Il. 21, 318.

The dat. sg., a loc. sg. in origin, ends in -vi from -uūi, as in Skt. bhruvi. $K\delta\rho\theta$]vi nomen propr., S.G.D.I. 5032, Cretan; $\Delta\rho\nu i$ nomen propr., S.G.D.I. 3758, 106, Rhodes; $\Delta\epsilon\rho\mu\nu$ i nomen propr., dissyllabic, end of hexameter, C.I.G.S. 579 = S.G.D.I. 875, Bœotian (Tanagra); $\nu\dot{a}\pi\nu$ i Ditt. 804, 17, 21, Epidaurus (late); $\dot{a}\sigma\phi\dot{\nu}$ i Ditt. 602, 2 (third or fourth century B. C.), of Iasus, cf. Schweizer, Pergam. Inschr. 146, 147. For Homeric diphthong, Attic- νi , see K.B., § 125, anm. 4. Herodian ii, 347 asserts that the ν i diphthong is never found at the end of a word, and explains Il. 16, 565 $\nu\dot{\epsilon}\kappa\nu$ i (dissyllabic) as a case of synizesis like that in Il. 1, 15 $\chi\rho\nu\sigma\dot{\epsilon}\phi\dot{\epsilon}$ $\dot{\epsilon}\lambda\dot{\epsilon}$ $\sigma\kappa\dot{\gamma}\pi\tau\rho\phi$. Arcadian $\pi\lambda\eta\theta\hat{i}$, S.G.D.I. 1222, 20, is not $\pi\lambda\eta\theta\nu\hat{i}$ as Hoffman, G.D. 246, Herwerden, and G. Meyer, Gr. Gr., § 348, take it, but is rather the dat. sg. of $\pi\lambda\dot{\eta}\theta\sigma$ s, perhaps with ι by mistake for - $\epsilon\iota$.

The nom. pl. regularly ends in -ves, from -uues. There are some examples of a so-called contracted nom. pl. in -vs, properly an accusative form used as a nominative (Brug., Gr. Gr. § 266; G. Meyer, Gr. Gr. § 355). According to Ælius Dionysius 182 (Schwabe) = Eustath. 1835, 43, ai κάχρνς was Attic. See K.B., § 125, anm. 3, for further examples.

In good Attic the acc. pl. ends in $-\tilde{v}s$. This is also the usual form in New Ionic, and it is found in Homer along with the other ending -vas. The ending -vas is found in late Attic, in New Ionic beside $-\tilde{v}s$, and frequently in Homer. Inscriptions present: $i]\chi\theta\hat{v}s$ Ditt. 584, 1, Smyrna; $\sigma\tau d\chi vas$ C.I.G. Ins. i, 3, 1188, metrical, Melos; $\tilde{v}s$ Ditt. 615, 13, Myconos, third century B. C.

The form in -vas is the one to be expected in original \bar{u} -stems from comparison with Skt. bhruvas, etc., from uuns. That in -vs presents more difficulty. Brugmann formerly (Grd. 2, 678) explained -us as an extension of the ending which was regular in the case of words which were originally ŭ-stems (cf. Cretan vivs), but now (Kurze Gr. 391, 392) assumes that while this ending was retained in case of original ŭ-stems (γένῦς), forms like ὀφρῦς are due to the influence of the acc. sg. ὀφρῦν, etc. (Cf. also Gr. Gr.³, § 267, 2). But it is altogether unlikely that the history of yevûs and ὀφρûs is to be separated in this way. According to all evidence the type -vs, -vos was, except for quantity in nom.-acc. sg., a unit in all dialects, and we may safely assume that any dialect that preserved *γένυνς would also have *ὀφρύνς, making the supposition that ὀφρῦς was due to an acc. sg. ὀφρῦν superfluous. That the -uvs, -us was preserved in this class, while it was largely given up in the original u-stems which remained in Class I, is of course not strange, since only in the latter were there forms in -ef- to influence the ending.

The gen. pl. ends in -υων, from -υμ-ōm, Skt. bhruvám. βοτρύων C.I.G. Ins. 476, 4 = S.G.D.I. 297, metrical, Mytilene; ἰχθύων Mon. Ant. vi, 302, 6 = Ditt.² 427, 6, Late Cretan, Ditt.² 584, 9, Smyrna, Ditt.² 615, 10, Myconos; ὑῶν Ditt.² 566, 14 = Michel 730, Pergamum.

To judge from the Skt. bhrūsū, etc., the Greek dat. pl. (a loc. pl. in origin) should end in -υσι. This seems to be retained in Homeric forms like γένυσοι πίτυσοι, which can stand for γένυσι πίτυσοι, but aside from forms like this there is no trace of an original -υσι. It has been replaced instead by -υσι, usually explained as having the short vowel after the other cases where the v is rightly short before a vowel ending as in the gen. sg. and pl. It is possible, however, that here again, as in the acc. pl., we may recognize the influence of the dat. pl. of the original short u-stems, this being retained in declension II, though lost in declension I, where it strictly belonged. Forms like νεκύεσσι, σύεσσι, σταχύεσσι, etc., are due to the extension of the generalized dat. pl. ending -εσσι, for which see above under Class I.

The nom.-acc. dual has -ve, from -v_f- ϵ . For this ϵ see above

under Class I. For the dual $i\chi\theta\hat{v}$ see G. Meyer, Gr. Gr., § 381; K.B., § 125, anm. 3. The gen.-dat. dual in -voiv calls for no remark.

The nom.-acc. pl. neuter in -va from -v_F-a has the usual consonant ending -a.

In all the forms of this declension where the suffix has the form -uu- the case-endings are those of the cons. stems, and this is true also of the dat. pl. 1

Like the nouns of Class II are declined the adjectives τέρνε and φόλνε, and the adjective compounds with words belonging under II as final member. For the latter see below under Compounds. τέρνε is known only from Hesychius, who has the following glosses: τέρν· ἀσθενές, λεπτόν, and τέρνας ἔππους· οὕτω λέγονται ὅσοι ἀδδηφάγοι εἰσί. ἔνιοι τοὺς ἀσθενές. Οf φόλνε we have only the following statements: φόλνες κύνες· οἱ πυρροὶ ὅντες μέλανα στόματα εἰχον· οἱ δὲ φύλακας, Hesychius, and φόλνε· φόλνες κύνες παρὰ τῷ ᾿Αντιμάχῳ, Hdn. ii, 938, 14, and i, 236, 26. It is probable that these two words τέρνε and φόλνε are substantives in origin.

Suffix -u-2 substantives.—The suffix -u- is shown to be inherited in several words and is to be assumed for many more in which there is the short final -vs or -v. Its formations are regularly barytone, and have usually the strong grade of root. In declension they would belong historically under Class I, but most of them have been transferred to the declensional type of long u-stems.

Examples of words with this suffix which follow the declension of Class I are: γόνν: Skt. jánu-n.; δόρν: Skt. dáru-n. (for both see p. 13); πῆχνς: Skt. bāhū- m. f. (see p. 13); πῶν: Skt. pāyū- m. "herdsman," Skt. $\sqrt{p\bar{a}}$ "protect;" πέλεκνς: Skt. paraçū- m. pārgu- m. "axe."

Wheeler, Gr. Nom. Accent 110, considers the accent of πίλεκυς secondary in comparison with paraçú-. Cf. Kretschmer, Einleitung 106, on etymology. Hesychius, s. v. ἡμιπίλεκον has the gloss τὸ γὰρ δεκάμνουν πέλεκυ (πέλεκυς Musurus) καλεῖται παρὰ Παφίοις. On the Cyprian inscription from Idalium, S.G.D.I. 60, 15, we have πε as an abbreviation of



¹ For 2-stems in modern Greek, see above, p. 29.

²But including some words in which the u obviously belongs to the root. See footnote, p. 12.

a word used as a measure of value. There is nothing to show declension in either case, and from Hesychius we should take the form to be neuter. It is usual, however, to supply the word in the Idalian inscription as $\pi\epsilon[\lambda \acute{\epsilon} \kappa \epsilon_{\Gamma} \epsilon_{\Gamma} \epsilon_{\Gamma} \epsilon_{\Gamma} \epsilon_{\Gamma} \epsilon_{\Gamma}]$, so, e. g., Deecke, S.G.D.I. 60, Hoffmann, G.D. i, 72, and this is without doubt correct, as shown by Ahrens, Philologus 35 (1876), 67, citing Hesychius, s. v. πέλεκυς, and Eustathius, 1878, 56, under the form $\pi\epsilon \lambda \acute{\epsilon} \kappa \epsilon_{\Gamma} \epsilon_$

Instances of transfer to Class II are: yévvs precisely equivalent to Skt. hánu- (p. 13); µévv precisely equivalent to Skt. mádhu- (p. 13). Another instance of such transfer is, I believe (with Kretschmer, K.Z. 31 [1892], 336), vékvs, which has the long final in Homer, but the short in Euripides and later Epic (see above, p. 37). To vékvs the Av. nasu-f. "corpse" is exactly equivalent, and there seems little doubt that this has the short -u. The Av. acc. sg. nasūm is of no weight because of the frequent presence of ū for u before final m, a graphic matter merely (Jackson, Av. Gr., § 23; Bartholomae, Ir. Grd. i, § 268, 1). Brugmann, Gr. Gr., § 180, places vékvs tentatively under the suffix -ū--uu-. For an absurd etymology of the ancients (derivation from κίκνς) see Cramer, Anecd. Ox. i, 296, 27.

Further examples of words with this suffix belonging to Class II are: ἄλυς: ἀλύω, etc.; cf. Hirt, Ablaut 510; ἄρκυς, connected by Curtius, Grdz. 341 with ἀράχνη, etc., from a γark "weave;" aρπυς, attributed by Etym. Mag. 148, 33, to Parthenius, and given as Æolic for $\tilde{\epsilon}\rho\omega$ s by Hesychius, is thought by Hoffmann, G.D. ii, 231, possibly to be connected with L. arcus, O.E. earh, "arrow;" γῆρυς: O. Ir. gair "cry," L. garriō, etc., Brug., Grd. i², 575; γλάφυ: γλάφω, connected by Bezzenberger, B.B. 27 (1902), 153, with Bulg. glob "hollow;" noihu: Goth. hails, O.H.G. heil "whole, sound," O.E. hael, O.N. heill "omen," O.B. cělů "sound," Hoffmann, B.B. 16 (1890), 240, Brug., Grd. i², 576; κόρθυς: κορθύω, κόρη, κόρος; ράπυς: L. rāpa, O.H.G. ruoba, Germ. Rube "rape;" στάχυς: O.H.G. stanga = Germ. Stange, cf. Eng. sting; kikus seems to be a reduplicated form from the root kuā ku "swell," Grk. kvéw, etc., with v as part of the root, not as suffix. See Brug., Gr. Gr. , § 166, and Hirt, Ablaut 386.

Suffix -tu-1 substantives.—The formations in Greek with this suffix fall into two groups, one a so-called primary, with nouns like ἀγορητύς, βρωτύς, etc., and a so-called secondary, with numerals like ἐκατοστύς, χιλιοστύς, etc. All the latter and a great majority of the former are nomina actionis. for Homer below, all of which are of this kind. Exceptions, real or apparent, are: ἄστυ, βλέτυς, δίκτυς, δίκτυς, ἴτυς, καττύς, κλιτύς, μάρπτυς, μίτυς, μόττυς, πίτυς, φίτυ, φίτυς. Without doubt the suffix -tu- was not consciously felt in any of these, and δίκτυ, δίκτυς, καττύς, μίτυς do not in all probability contain the suffix -tuat all. δίκτυ is given only by Etym. Mag. 275, 25, as from δίκτυον "net," but is probably only a figment of the grammarian. is some sort of animal mentioned only in Hdt. 4, 192, and by Hesychius. With καττύς "a piece of leather" (Aristophanes) cf. καττύω κασσύω from *κατ-σινιω. μίτυς "bees-wax" is found (ter) in one passage in Aristotle, H.A. 9, 40, 10. Its etymology is uncertain. µôrrus is known only from Hesychius, who has µôrrues. οί ἔ[γ]κλυτοι και παρειμένοι.

Of the others, βλέτυς "leech," known only from the Hesychian gloss βλέτυς · αὶ βδέλλαι, is taken by Lobeck, Rhematicon 14, from a verb βλέω (cf. βλεῖ · βλίσσει, ἀμέλγει, Hesych.), with mistaken accent for βλετύς. It may have had the same development of meaning from "a sucking" to "sucker" seen in Skt. mántu-"counsel" and "counsellor." So also μάρπτυς, known only from the Hesychian gloss μάρπτυς · ὑβριστής, probably with mistaken accent for μαρπτύς, from meaning "insolence" could come to mean "an insolent person." This word has been read in Æsch. Suppl. 826, where, however, the MSS. readings are corrupt and μάρπτις is now commonly given.

Connected with the root bheu "be, become," are φῖτυ, found for φίτυμα in Aristophanes and Eupolis, and φῖτυς, used by Lycophron and frequently mentioned by grammarians. Brugmann, Ber. sachs. G. d. W., 1901, 96, suggests that φῖτυς "begetter," and φῖτυ "the thing begotten," both rest on an abstract *φῖτυς "the begetting."

¹ For the suffix cf. Lobeck, Paralipomena 439 ff.; Kretschmer, K.Z. 31 (1892), 333 ff.; K.B., § 329, 28, 272; Brugmann, Grd. 2, 304, 306, Gr. Gr.², § 220, Ber. sächs. G. d. W., 1901, 95.

ἄστυ, ἴτυς, πίτυς are almost the only words with this suffix for which direct cognates are found in other languages (see below, p. 50), and these with κλιτύς are the only words, except numerals, in use through a wide range of authors, yet these are just the words for which there was in Greek no consciousness of suffixal τυ-. ἄστυ from the root μεs, "dwell," no doubt originally meant "dwelling" in the abstract. (See below, p. 50.) So ἴτυς (p. 50) "circle" can easily have developed from "a rounding." κλιτύς from the root klei, "lean," can have developed the meaning "hill" from "a sloping, leaning." πίτυς "pine" (p. 50) is not so easy and constitutes, perhaps, the sole exception to the rule.

There are not quite one hundred Greek nouns in $\tau \tilde{v}$ s and only $\tilde{a}\sigma\tau\nu$, $\phi\hat{\imath}\tau\nu$, and $\delta(\kappa\tau\nu)$ in $\tau\nu$. Of the latter, $\tilde{a}\sigma\tau\nu$ is neuter, and so presumably are $\phi\hat{\imath}\tau\nu$ and $\delta(\kappa\tau\nu)$, though there is no specific evidence to that effect.

For the nouns in $-r\tilde{v}$ s I have found evidence for feminine gender in twenty and for masculine in only one, δ $\phi \tilde{\iota} \tau vs$ (Eustathius). For the remainder there is no evidence, but except $\delta \iota \kappa \tau vs$ (doubtful at the best, see above) in all of them the $-\tau vs$ has the same function that it has in those undoubtedly feminine, and hence there is every reason to assign to these also the feminine gender. Liddell and Scott give $\delta \iota \kappa \tau vs$, Hdt. 4, 192, and $\kappa \tau \iota \sigma \tau vs$, Hdt. 9, 97, as masculine, but there is nothing in Herodotus to show the gender, and the meaning and formation of $\kappa \tau \iota \sigma \tau vs$ justify Schweighäuser (Lex. Hdt.) in taking it as feminine. Some, like $\mu \dot{a}\rho \pi \tau vs$, for which there is no evidence, may, however, have been masculine because of special use with reference to a person (cf. $\phi \iota \tau vs$). So Pape, Etym. Worterbuch, without evidence gives $\mu \dot{a}\rho \pi \tau vs$ as masculine.

The accent of the neuters $\delta\sigma\tau\nu$, $\phi\hat{\iota}\tau\nu$, $\delta\iota\kappa\tau\nu$ (?) is barytone, in agreement with what appears to be the I.E. rule for *u*-stem neuters (above, p. 12).

The accent of the nouns in -τὖs is oxytone except in the following instances: βλέτυς, δίκτυς, ἴτυς, μάρπτυς, μίτυς, μόττυς, πίτυς, πλάτυς, φῖτυς, Æolic χέλληστυς not constituting a real exception.

 $\pi\lambda d\tau vs$ is found only in Hesychius and is probably a mistake

for $\pi\lambda\hat{a}\tau is$. For the others see above, p. 43. Sixtus and $\mu i\tau is$ do not count, since they hardly contain the suffix -iu.

In declension, so far as known, nouns in $-\tau vs$ $-\tau v$ follow Class II except $\alpha \sigma \tau v$, which belongs to Class I. As a matter of fact, over thirty of the total are known only from glosses and hence declension, etc., cannot as a rule be determined, and of the remainder only about thirty have any evidence for declension. On the other hand, there is no evidence that any substantive in $-\tau vs$ $-\tau v$, except $\alpha \sigma \tau v$, belongs to Class I.

For the quantity of the final syllable in the nom. and acc. sg. we have the statements of the grammarians and the usage of the poets. There is evidence from the latter source for the quantity in only a few words. Homer has the long vowel in ἀκοντιστύς Il. 23, 622; βρωτύς Il. 19, 205, Od. 18, 407; κλιτύς Od. 5, 470, but in Attic this word has a short final (cf. K.B., § 125, anm. 2); μνηστύς Od. 16, 294, Od. 19, 13; ὀρχηστύς Il. 13, 731, a line bracketed by Dindorf. Callimachus has the long vowel in διστευτύς, read by Scaliger in Hymn to Apollo 42, where Schneider retains the MSS. -την. Homer has a short vowel in ἴτὔs Il. 5, 724, Lycophron shows a short vowel in pirus 462, 486, and Apollonius Rhodius has θελκτύν with short vowel, i, 515, but Lobeck, Paral. 440, would read θέλκτιν because the final is short and the MSS. vary in accent. Liddell and Scott give ἐπητύς with short ὕ, and οτρυντύς with long υ, but there is no evidence for either. is nothing in Homer to show that any oxytone in -tis has a short The testimony of the grammarians is to the effect that feminine oxytones have the long \bar{v} in the final syllable. Lentz' edition of Herodian i, 527 and footnote. The short final in κλειτύς in Sophocles and Euripides is explained as an extension of the short vowel from the oblique cases. So Kretschmer, K.Z. 31 (1892), 333, and Brugmann, I.F. 11 (1900), 273, Gr. Gr. 3 178. Such instances of shortening by analogy are not confined to nouns in -705; cf. K.B., § 125, anm. 2. With the exception of κλειτύς in Attic, and the isolated and doubtful θελειτύς, it may be said that, so far as we have evidence, oxytones in $-\tau v$; had long \bar{v} , while barytones in - rus had short v.

Nouns with the suffix -tu- in the related languages (pp. 13 f.)

are mainly masculine barytones with short final. The Greek presents a striking contrast with its preponderance of feminine oxytones with long final.

So far as I know, Kretschmer, K.Z. 31 (1892), 333, is the only one who definitely sets up the suffix $-t\bar{u}$ - for these Greek oxytones, in contrast to the $-t\tilde{u}$ - seen in $t\tau v$, $\phi t\tau v$, etc., and in the formations (chiefly masculine barytones) of other languages. By his view the suffix $-t\bar{u}$ - does not appear outside of Greek except in extensions such as Lettic $-tuv-\bar{a}$ -, L. $-t\bar{u}t$ -, $-t\bar{u}t$ -, and $-t\bar{u}d\bar{o}n$ -. Others who have spoken of the suffix in Greek have given it as parallel to that found in Sanskrit, Latin, Germanic, etc. So for example, Von Bahder, Verbalabstrakta 94; Hirt, Akzent 221; and especially Brugmann, Grd. 2, 308, Gr. Gr. § 220.

Of course no one will deny that the suffix of the Greek oxytones has a long vowel. The question is whether Greek inherited from the parent speech two different suffixes -tu- and -tū-, or the quantity of the Greek -τū- is secondary. I am inclined to the latter opinion. In formation these nouns in -rus bore an at least apparently close relation to verbals in -70s, accented on the final; cf. βοητύς : βοάω, ἀγορητύς : ἀγοράομαι with ἀγαπητός : ἀγαπάω, κοσμητός : κοσμέω. Hence the oxytone accent, even if itself secondary, must have been of early origin. Then their gender is feminine either from the influence of other abstracts, like those in -ois, -ris, which were feminine (so Brugmann, Grd. 2, 304; cf. Von Bahder, loc. cit. supra, on orig. gender), cf. the case in West Germanic, above, p. 14, or were themselves originally feminine (Delbruck, Grd. 3, 118; cf. Brug., Gr. Gr.*, § 220). In either case the feminine gender must have been of early origin. With this agreement in accent and gender it was most natural that there should be agreement also in the quantity of the final with those nouns which formed the basis of I.E. Type II as represented in the Greek Class II (above, pp. 20 f., 36). Futhermore the suffix performs the same function as is performed by -tu- in related languages. Hence I do not consider it necessary to assume an I.E. suffix $-t\bar{u}$ -.

It is frequently stated that the suffix belongs particularly to the Ionic dialect. Eustathius 1180, 6 gives it as Ionic, but Didymus on Il. 2, 600 calls it Æolic. The statement that it is Attic, made by the scholiast on Il. 19, 233, is clearly an error, and there is a v. l., 'Αντιμάχειος for 'Αττική. Pape, Etym. Worterbuch 291, and L. and S. (passim) give it as an Ionic suffix. Brugmann, Gr. Gr., § 220, says it is especially productive in Ionic; cf. his Grd. 2, 308. In K.B., § 329, it is said to be "poetic and dialectic," while Herwerden. Lex. Graecum suppl. et dial., s. v. ἐπισμυκτύν, βαλλητύς, ἀπαστύς, asserts that it is a favorite suffix in Ionic and Cretan. An analysis of the material gives the following results.

There are thirteen found in Homer only, or in Homer and glosses in Hesychius, Eustathius, etc., viz., ayophtús (1), akoutustis (1), akoutustis (1), akoutús (1), bohtús (1), daitús (1), edhtús passim, ekentús (2), enhtús (1), $\mu\nu\eta\sigma\tau\iota$ ús (3, also in Anacreon?), dapistús (3), otpuvtús (bis, same passage), pustaktús (1), tavustús (1).

There are seven in Homer that are also found in other authors, viz., βρωτύς Homer (2), Anth, Pal., and Philoxenus ap. Atheneus, γραπτύς Homer (1), Apoll. Rh., and grammarians, κιθαριστύς Homer (1), Phanocles ap. Stobeus, ὀρχηστύς Homer, Eurip. (1), Lucian (1), ἴτυς (p. 44) Hom., Hdt., Eurip., Xen., Galen, etc., κλε(ι)τύς (p. 44) Hom., Eurip., Soph., Lycophron, Nicander, πίτυς (p. 44) Hom., Hdt., Plutarch.

Callimachus has the following: ἀρπακτύς (1), ἀσπαστύς αρ. Suidas (1), γελαστύς (1), διωκτύς (1), μαστύς αρ. schol. (1), [διστευτύς] (1). Callimachus and Manetho have ἀλητύς.

Homeric Hymn to Apollo 162 has [κρεμβαλιαστύς].

Herodotus has: $[\kappa a \tau a \pi \lambda a \sigma \tau \dot{v}s]$ (1), $\kappa \tau \iota \sigma \tau \dot{v}s$ (1), $\lambda \eta \bar{\iota} \sigma \tau \dot{v}s$ (1), $\delta \iota \kappa \tau \upsilon s$ (p. 43), $\iota \tau \upsilon s$ (p. 44), $\pi \iota \tau \upsilon s$ (p. 44).

Hippocrates has φλεγμαντύς as a v. l., viii, 96, and no others. The usage of other writers is as follows: Soph. κλειτύς (p. 44); Eurip. ὀρχήστύς, ἴτυς (p. 44), κλειτύς; Aristophanes καττύς (p. 43), φῖτυ αp. Eustath. (p. 43); Thuc. πεντηκοστύς; Philoxenes αp. Athenæus βρωτύς; Plato σωφρονιστύς; Aristotle μίτυς (p. 43); Xen. ἴτυς (p. 43), ἐκατοστύς, μυριοστύς, πεντηκοστύς, χιλιοστύς; Antimachus αp. schol. πωρητύς; Æschines and Demosthenes

¹ Figures in parentheses after a word refer to the number of occurrences. Reference is made to pp. 43 f. for words listed there as not consciously having the suffix -tw-. Words due to emendation are bracketed.

τριττυς; Lycophron φίτυς (p. 43), κλειτύς (p. 44); Eratosthenes ap. schol. ἀντιμαχηστύς; Apoll. Rh. θελκτύς (a doubtful word), γραπτύς; Phanocles ap. Stobesus κιθαριστύς; Anth. Pal. βρωτύς, [ἀλαλητύς]; Manetho ἀλητύς; Nicander κλειτύς; Plutarch πίτυς (p. 44), ἐκατοστύς; Lucian ὀρχηστύς, τετρακτύς; Galen ἴτυς; Oppian ποθητύς.

Cretan inscriptions have ἀμφαντύς (written ἀμπαντύς), ὀπυστύς, Lex Gort. sixth century B. C. (see Searles, Lex. Stud.), and the possible ἐρετύς, Mon. Ant., iii, 67, n. 127.

The following are found in Hesychius only: [ἀειεστίς], ἀπεστίς, [ἀποδαστίς], ἀρτίς, βλέτις (p. 48), δειπνηστίς, δωμητίς, [ἐητίς], ἐλειτίς a mistake for ἐλεητίς, [ἐπεικτίς], θατίς, [ἰατίς], μάρπτις (p. 48), ξιφιστίς, [ὀργητίς], ὀρεκτίς, πλάτις (p. 44), ποτητίς, [τρικτίς], φραστίς, χαλεπτίς, χραμβαλιαστίς, ἀρητίς. Hesychius has ζωείς ἡ ζωτίς · θώραξ. This has been corrected to ζωγίς ἡ ζωτίς from Cyrillus, who has ζωγίν θώρακα. Perhaps ζωτίς is a mistake for *ζωστίς.

To be found in the Etym. Mag. only are: ἀπαστύς, δίκτυ (p. 43), πρακτύς. Suidas alone has ἀφραστύς and δωτύς. Bekker A.G. has ἀβολητύς and this is restored in Hesychius. Hesychius and Athenseus have βαλλητύς. Theognostus in Anecd. Cram. ii, 16, 1 has ἰκτύς.

Brugmann, Gr. Gr., § 220, cites a form ἀποκοντιστύς not known to me from other sources, and probably a mistake for ἀκοντιστύς. He also has a form τακτύς in Ber. sachs. G. d. W., 1901, 95 not known to me from other sources. Pape, Etym. Worterbuch, cites ἀκεστύς, which I do not find elsewhere. Herwerden, Lex. suppl., etc., emends Hesychius and reads ἐπισμυκτύν.

A complete list of the numerals in -τυς¹ is as follows: ἐκατοστύς Xen., Plutarch, Inscriptions; μυριοστύς Xen. (1); πεντακοντύς doubtful word, schol. on Od. 3, 7; πεντακοσιοστύς Etym. Mag.; πεντηκοστύς Thuc., Xen.; τετρακτύς Pythagoreans and Lucian; χιλιαστύς Bechtel, Ion. Inschr. 221 and 147, 20; χιλιοστύς Xen.; χέλληστυς Æol. inscr. S.G.D.I. 276; πεντεχιλιοστύς Eccl., and finally the various forms τριτύς, τριπτύς, τριπτύς, τριπτύς.

The form τριπτύς on an inscription from Ceos of the second

1 For the numerals in -τυς see K.-B., §330, 12, A, 285, Brug., Gr. Gr.3, § 248, 2 with the literature cited.

century B. C., Ditt.² 984, 6, is an error for τριττύς or τρικτύς. This τρικτύς is an emendation for τρικτής in Hesychius demanded by the alphabetical order and borne out by Delphian τρικτεύαν, Cauer², 204, 34, and by Delian τρικτυαρχοῦντος of the second century B. C., Ditt.² 588, 19. Hence Dittenberger, loc. cit., for τριπτύς is inclined to read τρικτύς. Hesychius has τριτύς· τρίας, and τριττύς is found in Æschines, Demosthenes, C.I.A. ii, 871, 1053, 500, 502, 517, 518, C.I.G. Sic. et It. 1363, 10, and perhaps elsewhere. τρικτύς from τρίχα is probably the original form and τριττύς arose under the influence of τριττός = *τριχίος, τριτύς under that of τριτός. (So Brug., Gr. Gr.², § 248, 2; cf. Schulze, K.Z. 88 [1895], 895.)

It is clear from the above that numerals form a class by themselves and appear to have been made as freely in Attic and other dialects as in Ionic. Excluding, therefore, the numerals and the words listed on p. 43, since in the latter there was no consciousness of the presence of a suffix -tu-, the situation for the remainder may be summarized as follows:

The suffix is found (1) in poetry: Homer twenty examples, Callimachus six or seven, and scatteringly in others; (2) in prose: (a) Ionic, Herodotus three, and one of these an emendation, Hippocrates one; (b) Non-Ionic, Lucian $\partial \rho \chi \eta \sigma \tau \dot{\nu} s$ (Timon c. 55) also found in Homer and Euripides; Plato $\sigma \omega \phi \rho \rho \nu \nu \sigma \tau \dot{\nu} s$; Atheneus (Ulpian) $\beta a \lambda \lambda \eta \tau \dot{\nu} s$ (406, d, 407, c); (3) in Cretan inscription of the sixth century B. C. two words, and the Hesychian gloss $\theta a \tau \dot{\nu} s \cdot \theta \epsilon \omega \rho i a$, which may be Cretan as Herwerden suggests, and is at any rate not Ionic.

There is no indication of dialect in the numerous glosses, except in Eustathius as given above, p. 46. Considering the relative infrequency of the suffix in Ionic prose, or indeed in any prose, one is led to wonder whether the use of it is not after all an indication not of dialect but of antiquity. The Cretan examples belong to the sixth century B. C., and among the poets Homer

¹ I cannot understand the statement made by Smyth, Ionic Dialect 396: "Noteworthy is the considerable number of nouns in -τύς in Ionic prose, which in Attic are poetical. Cf. βρωτύς, κτιστύς, έδητύς, ότρυντύς" In his list of eight examples one (νηδύς) does not contain the suffix at all, ἀρτύς is known only from Hesychius, βρωτύς, ἐδητύς, ότρυντύς are Homeric, not Attic, while κτιστύς, ληστύς, and φλεγμαντύς constitute the only examples of this suffix in Ionic prose, except the emendation κατανλαστύς in Herodotus.

uses the suffix most freely. The few instances of its use among prose writers might be due to poetical reminiscence. If, however, its use in Homer be taken as Ionic, it must be said that the suffix was not confined to that dialect, but belonged to Cretan as well, and possibly to Doric in general.

Aside from the numerals, words of this formation are mostly directly related to Greek verbs. For example, Homer has: ἀγορητύς το ἀγοράομαι, ἀκοντιστύς το ἀκοντίζω, ἀλαωτύς το ἀλαόω, βοητύς το βοάω, etc.; of. the list for Homer above.

Change of τv to σv ($\eta \mu \sigma v$ s).—The question of the change of τv to σv has been treated most recently by Lagerkrantz, Zur gr. Lautgeschichte (Upsala, 1898) 121 ff., and, more fully, by Brugmann, Ber. sächs. G. d. W., 1901, 89 ff. Brugmann had formerly (Gr. Gr. 42) rejected the change of τv to σv as a phonetic development, but now accepts it as phonetic except initially and after consonants. He ascribes the frequent presence of τv after vowels in words in τv s to the influence of words like $\mu v \eta \sigma \tau v$ s, etc., where τv coming after a consonant did not change. He does not, like Lagerkrantz, limit the phenomenon to τv , but admits it for both τv and τv . His general conclusions are accepted by Kretschmer, Berlin. Phil. Woch., 1902, 1492–95.

The most certain example of συ in the suffix is ημσυς. In view of Cretan ημιτυ-έκτω and Epidaurian ημίτειαν, few will question the accuracy of Brugmann's statement (loc. cit., 91) that the suffix in ημσυς is identical with that in τρικτύς, τετρακτύς, πεντηκοστύς, etc., that the word was originally a substantive, early became neuter after τὸ δλον, and thereupon became an adjective,

ήμωσν and ήμωσν being already in use. That the suffix was -τυ-had been suggested as early as 1886 by Bechtel in his review of the first edition of Brugmann's grammar, Philologischer Anzeiger xvi, 16. That the feeling for the suffix should be soon lost, and hence that the treatment should be different from that of other numerals in -τυς is not surprising in view of the special meaning of ήμωσυς.

The forms of the different dialects present two types: (a) those in -70- or -50-, (b) those in -550- or -50-. In Brugmann's list the most important citations for the former are: Cretan [ή]μτυ-έκτω, Mus. Ital. ii, 166, n. 8, l. 3, in the sense of ημίεκτον; Epidaurian οίνου ήμίτειαν, Εφ. Αρχ., 1899, 1, n. 1 = Ditt. 938, 9, 27; Phocian τὸ ήμισυ, S.G.D.I. 1547, 7, called "vorromisch" in the Sammlung, loc. cit.; and for the latter: Cretan τὰ ἡμισσα, Mus. Ital. iii, 601 ff., 7; Epid. τὸ ημισσον, S.G.D.I. 3325, 15. In addition to the forms cited by Brugmann I may add for a: Paros ήμισυ, Ditt. 569, 6 (300-250? B. C.); Magnesia ημίσει, Ditt. 552, 84 = Kern, Magn. n. 100 (second century B. C.), Ditt. 554, 15 = Kern, n. 99 (second century B. C.); Lebadea ήμισέων, Ditt.³ 540, 44 = I.G. Sept. i, 3073 (175-171 B. C.); Teos ήμισείας τὰς, Ditt. 177, 8 (306-301 B. C.); Megara ημυσυ, C.I.G. Sept. i, 48 (third century B. C.); Oropus ημυσυ, C.I.G. Sept. i, 3498 (200 B. C.); Halicarnassus ημυσυ, Bechtel, Ion. 241, ημισυ, C.I.G. Ins. i, 3, 1119, 7 (Roman period); Thera τὰ ἡμίση, C.I.G. Ins. i, 3, 330, 197 (210-195 B. C.); and for b: Cretan τὸ ημισσον, Mon. Ant. vi, 302, 7 = Michel 440, 7 (fourth century B. C., Michel); Cos $\eta\mu$ l $\sigma\sigma\varphi$, Ditt. 598, 58 = S.G.D.I. 3627 (late); $\eta\mu\sigma\sigma$, C.I.G. Sic. et It. 2030 (Roman period); Astypalea ημίσφ, Ditt. 493, 11 = C.I.G. Ins. i, 3, 168, 12 (first century B. C.); Megara ημισον, S.G.D.I. 3052, a (late).

The two forms with τ , Cretan $[\dot{\eta}]\mu\nu\nu\dot{\epsilon}\kappa\tau\omega$ and Epidaurian $\dot{\eta}\mu\dot{\iota}\tau\epsilon\iota\alpha\nu$ are both early, before the close of the fifth century B. C. The earliest examples of $\ddot{\eta}\mu\iota\sigma\sigma\sigma$ are Delphian, Epidaurian, and Cretan, all of the fourth century B. C., one occurrence of each. The examples of $\ddot{\eta}\mu\sigma\sigma$ are all later than the second century B. C.

Because of the forms in τ, Brugmann rightly rejects the view of G. Meyer and Meillet that ημισσο- arose from I.E. *sēmi-suo-,

and also the view of J. A. Smith, I.F. 12 (1901), 4, that **\text{\$\text{\$\pi\subset}\$u\times signal} is formed from the old loc. pl. of the stem \$\sigma\tilde{e}mi-\text{ (*somissu "in halves")}. But Brugmann continues:

Aber, wie bei *sēmi-suo-, gerāt man auch bei der Zurückführung von -σσο- auf uridg. -tμο- (C. A. Müller, De litera Σ, pp. 62, 68) mit den Lautgesetzen in Konflict wegen kret. ήμισσα, für das *ήμιττα zu erwarten wäre (G. Meyer, Gr. Gr. 350, K.B. i, 640). Nur mit der Annahme ist durchzukommen, dass *ήμιτυ- in urgriechischer Zeit zu ήμισυ- geworden war. Dieses wurde in die o-Deklination übergeführt. Dabei oder darauf wurde υ (u) konsonantisch, und solches *ήμισρο-ν (*ήμισνο-ν) ergab weiterhin ήμισσον (cf. lesb. ἴσσος = kret. ρίσρος). In analoger Weise entstand γλυκκόν, älter *γλυκρον, aus γλυκύ. Hiernach hat epid. ἡμίτειαν sein altes lautgesetzliches τ bewahrt, während die Formen homer. ἡμίσεες u.s.w. ihr σ von ήμισυς -συ bezogen haben; umgekehrt kret. [ή]μιτυ- für ἡμισυ- nach den auf der Stammgestalt *ἡμιτερ- beruhenden Formen.

The Cretan inscription cited by Brugmann (Mus. Ital. iii, 610) for the form $\eta \mu \sigma \sigma a$ is datable by the name of the king somewhere between 277 and 239 B. C. It contains the non-Cretan gen. sg. $\pi\delta\lambda\epsilon\omega$ s, and the more significant form $\pi\rho d\sigma\sigma\bar{\epsilon}\nu$, l. 14. The still earlier Cretan inscription, not cited by Brugmann (Mon. Ant. vi. 302), is dated by Michel in the fourth century B. C. But this has πόλεως, the acc. pl. in -ovs not -ovs, and the form ταν θάλασσα [ν l. 18. So far as evidence is at hand it is known that those dialects which have $\tau\tau$ from -ki-, etc., have also $\tau\tau$ from -tu-, and that the treatment is exactly parallel. In other words we should expect ττ from -tu- wherever we find πράττων, etc. In accordance with this, Meyer, Blass, and Brugmann are manifestly correct in assuming that in Cretan we should expect *ήμιττα. The fact that in the Cretan inscriptions that do have jugoo- we also find $\sigma\sigma$ in $\pi\rho\dot{a}\sigma\sigma\omega$ and $\theta\dot{a}\lambda a\sigma\sigma a$ is conclusive proof that the Cretan forms ημισσον and ημισσα show nothing as to the actual condition in early Cretan, and hence cannot be taken as evidence for a proethnic Greek change of ημιτυ to ημισυ.

So far, therefore, as the forms of ημσυς are concerned, the change may or may not have taken place in prehistorical Greek. It is entirely possible that the change of τυ to συ took place in historical Greek times and that forms like ημσσου (Cretan and

Bostian * $\dot{\eta}\mu\iota\tau\tau\sigma\nu$) arose from * $\dot{\eta}\mu\iota\tau\tau\sigma\nu$ before the change. In that case the most natural supposition is that the relation of $\tau\nu$ to $\sigma\nu$ is dialectic, and on this assumption we should expect $\tau\nu$ in those dialects which have $\delta\ell\delta\omega\tau\iota$, etc., and $\sigma\nu$ in those which have $\delta\ell\delta\omega\sigma\iota$, etc. Against this assumption are the forms: Phocian $\ddot{\eta}\mu\mu\sigma\nu$ (S.G.D.I. 1547, 7), with a 3d sg. in $\tau\iota$, Theran $\dot{\eta}\mu\ell\sigma\eta$ (C.I.G. Ins. i, 3, 330, 197), with 3d pl. $\lambda\dot{\alpha}\beta\sigma\nu\tau\iota$, and Megarian $\ddot{\eta}\mu\nu\sigma\nu$ (C.I.G. Sept. i, 43). The Tean inscription (Ditt.² 177, 8) with $\dot{\eta}\mu\ell\sigma\iota\sigma$ has also $\ddot{\epsilon}\chi\sigma\nu\sigma\iota$. Other forms with $\sigma\nu$ in Doric dialects are so late as hardly to count. And the two most important forms (Phocian $\ddot{\eta}\mu\sigma\nu$ and Theran $\dot{\eta}\mu\ell\sigma\eta$) are also so late that in spite of the presence of true Doric characteristics in the inscriptions the forms in $\sigma\nu$ may be due to the $\kappa\sigma\nu\nu\dot{\eta}$.

Suffix -iu- substantives.—This is seen only in νίνς, and perhaps also in οἰζνς (with change to long ν under influence of feminine gender and oxytone accent), if Bezzenberger's etymology, B.B. 26 (1902), 168, is correct. He takes ὀἰζνς from *ὀἰδινς, *ὀ-ριδινς, in Ablant with Lett. waidet "complain, lament," waidi "complaint, lament," and hence belonging to Lett. wai "ah, woe," Goth. vai, O.H.G. we, L. vae.

Suffix -nu- substantives.—This is found in $\theta\rho\hat{\eta}\nu\nu$ s: $\theta\rho\hat{a}$ - $\nu\nu$ s, Skt. 1/dhr "hold." $\lambda\nu\gamma\nu\hat{\nu}s$ ($\bar{\nu}$ Tryphiodorus), hence with transfer to $\bar{\nu}$ under influence of gender and accent, is uncertain etymologically and can be placed here only with reservation.

Suffix -ru- substantives.—The most certain example is δάκρυ: L. dacruma, lacruma, O. Welsh dacr, Corn. dagr, Goth. tagr, O.H.G. zahar, Eng. tear, all in sense of "tear;" cf. above, p. 16. Another, less certain, is μάστρυς: μάστροπος, μαστεύω, etc. The words βότρυς, κάχρυς, and ὀστρύς, a sort of tree, are too uncertain etymologically to admit decision as to suffix.

Suffix -lu- substantives.—This suffix is probable in ἀχλύς. Berneker, Die Preussische Sprache 278, connects O. Prussian aglo "rain" (for aglu), and suggests on the basis of akh: ak the possible connection also of Lith. ãklas "blind," L. aquilō "northwind." Cf. Fick i³, 474. On the other hand Fick i⁴, 348 separates ἀχ-λύς from Lith. ãklas, L. aquilus "dark," and says it probably belongs with νυχ-. Even in that case the suffix would be -lu-.

See also G. Meyer, Alban. Worterbuch s. v. akul "ice." The suffix is also probable in ἔγχελυς. Cf. ἔχις, L. anguis, etc., though the vowel relation is not clear, and direct connection is improbable.

Suffix -gu- substantives.—Cf. above, p. 16. This suffix is frequently assigned to πρέσβυς. Brugmann, Ber. sächs. G. d. W. 1889, 53, compared the suffix in ἐγγύς, μεσσηγύς, Lith. żmogùs "man," Skt. vanargū- "roaming in the forest," puro-gavā- "leader." Cf. his article in K.Z. 24 (1879), 62. Bezzenberger, B.B. 4 (1878), 345, compared Skt. adhrigu- "irresistibly advancing" and vanargū-, and gave to the gu the meaning "going." For a less plausible meaning see Curtius, Grdz. 479. Though Brugmann, Grd. i², 595, says that only uncertain guesses have been made about the latter part of the word, he tacitly accepts in his Kurze Gr. 473 the meaning "going" by translating πρέσβυς "im Alter vorausgehend." Cf. also his Gr. Gr. ² 127, and Grd. i², 754.

As regards the distribution of the forms βν- and γν- the latter is seen in, or to be inferred from, most of the forms outside of Attic-Ionic. Thus Cretan: πρεῖγυς S.G.D.I. 4992, πρήγιστος, etc., S.G.D.I. 5034; πρεισγευτᾶν gen. pl. S.G.D.I. 5167, 11, from which the frequently cited πρεῖσγυς is inferred. Bœotian: πρισγεῖες S.G.D.I. 705, 6 (πρισγεες, on stone) = C.I.G. Sept. 2418; πρισγεῖ[ες B.C.H. 25 (1901), 137; πρισγεῖ[ας C.I.G.S. 1720. Chœroboscus 234, 23 = Bekker, A.G. 1413, = Gram. Græci iv, 1, p. 233, 7 gives πρέσγυς πρέσγυς as Doric. Hesychius and Etym. Mag. 723, 17, have σπέργυς· πρέσβυς.

The Attic-Ionic regularly has the forms with βv , and so far as I know this appears elsewhere only in Thessalian S.G.D.I. 345, 12, and Lesbian; cf. Hoffmann, G.D. ii, 500.

The forms with γ would be phonetic in those cases where $g^{\frac{\alpha}{2}}$ came before u, those with β in cases where $g^{\frac{\alpha}{2}}$ was not followed by u. Then we must assume leveling in one direction in some dialects and in the opposite direction in others. Cf. Brugmann, Ber. sachs. G. d. W., 1889, 53. Schulze's assumption of dissimilation (Gott. gel. Anz., 1896, 249), Doric $\pi \rho \epsilon \sigma \gamma \epsilon [\epsilon]$ from * $\pi \rho \epsilon \sigma \gamma \epsilon \epsilon \epsilon$, is less plausible.

For the first part of the word see Brugmann, Kurze Gr. 473, I.F. 13 (1902), 164, Grd. 2, 402, 406, Ber. sächs. G. d. W., 1889, 53, K.Z. 24 (1879), 62; Per Persson, Studia Etym. 95; Baunack, Inschr. v. Gort. 30; G. Meyer, Gr. Gr. 184; J. Schmidt, K.Z. 26 (1883), 381. Cf. also on the word Etym. Mag. 687, 11; Herodian ii, 324.

The word στλεγγύς, name of a plant, found only in Theophrastus, H. Pl. 8, 4, 3, may contain this suffix, but the etymology is uncertain.

Suffix $-\bar{u}$ - substantives.—Words with this suffix in Greek are prevailingly feminine and with the accent on the final syllable. It is probable that Greek inherited the use of \bar{u} under the accent to represent feminines, as the same use is found in Sanskrit, but there is no Greek word with this suffix which has been shown to have cognates with long \bar{u} in other languages, unless it be $\chi\ell\lambda\nu$ s, see below. The root-nouns in long \bar{u} may have been the starting-point for the use of the \bar{u} as a suffix in both Sanskrit and Greek. Of these root-nouns Greek has some which show the inherited \bar{u} . These are given here, although it is understood, of course, that in them the \bar{u} is not a suffix.

Examples of such root-nouns¹ are: is $\sigma \hat{v}s$: L. $s\bar{u}s$, Umbr. sim, $i\chi\theta\hat{v}s$ m.: Lith. gen. pl. $\dot{z}uv$ - \tilde{u} "fish," Arm. jukn "fish;" $\dot{o}\phi\rho\hat{v}s$: Skt. $bhr\bar{u}$ -, etc., above, p. 21, is usually classed as a root-noun (e.g., by Brugmann, Grd. 2, 455), but Osthoff, M.U. iv, 217, and Kretschmer, K.Z. 31 (1892), 336, take it as a dissyllabic stem, which in Sanskrit, etc., lost its root-vowel through suffixal accent. Kretschmer, loc. cit., 332, also gives as a root-noun $i\lambda\hat{v}s$ from $i\sigma\lambda\hat{v}s$ with prothetic ι as in $i\chi\theta\hat{v}s$, comparing L. lutum, $pollu\bar{o}s$, Grk. $\lambda\hat{v}\mu a$, $\lambda\hat{v}\mu a$, $\lambda\hat{v}\mu a$ from * $\sigma\lambda\hat{v}$ - μa . Otherwise Thurneysen, K.Z. 32 (1893), 352.

Brugmann, I.F. 11 (1900), 271 ff., connects $\nu\eta\delta\dot{\nu}s$ with L. abdōmen, taking it as a compound of $\nu\eta$ - "down, below," and $\delta\bar{\nu}$ a root-noun belonging with $\delta\dot{\nu}o\mu a\iota$ "I enter." It has a short final in Callimachus, and on two Bœotian metrical inscriptions, C.I.G. Sept. 2544 and 2545.

 $\delta\rho\hat{\nu}s$ bears the same relation to $\delta\delta\rho\nu$, $\delta\rho\nu$ as Skt. asita-j\(\textit{n}t- f., "with dark knees," does to Skt. j\(\textit{n}u-. See Osthoff, Parerga

 1 μῶς is an original s-stem, but has in Greek some forms like the \bar{u} -stems, e. g., acc. sg. μῶν, gen. sg. μὖνς after the analogy of ὀφρῶν ὀφρώνς, etc. Cf. Schulze, Q.E. 133 f.

148 ff. Otherwise J. Schmidt, K.Z. 25 (1881), 52. The feminine gender may be secondary, Osthoff, *loc. cit.*, 152. The masculine is found on an inscription from Acarnania in E ϕ . A $\rho\chi$., 1893, 32. For the word in general cf. Hirt, Ablaut, § 772, 151.

The word iγνίς f. "poples" presumably has the long final, although no metrical proof is at hand. It is evidently to be connected with γόνν (J. Schmidt, loc. cit. supra 53) and is exactly parallel to Skt. asita-jaú-. The ι is prothetic, and the -γνῦς bears the same relation to γόνν as δρῦς to δόρν.

The feminine oxytone $\delta\epsilon\lambda\phi\dot{\omega}$ has presumably the long \bar{v} , and the cognates make it clear that we have here the suffix $-\bar{u}$, although no other language shows the word with this suffix. $\delta\epsilon\lambda\phi\dot{\omega}$: Skt. gdrbha- "fetus," Goth. $kalb\bar{o}$, O.H.G. kalba "female calf," O.E. cealf, Eng. calf.

 $i\theta \dot{v}s$ with long final in Homer is an example of the long \bar{u} in an oxytone feminine beside the oxytone masculine and neuter adjective with short u.

 $\pi\lambda\eta\theta\dot{\nu}s:\pi\lambda\dot{\eta}\theta\sigma$, $\pi\lambda\dot{\eta}\theta\omega$, has long \bar{v} in Homer, and examples of short final among later writers are doubtful. It is found S.G.D.I. 1479, 18, $\pi\lambda\eta\theta\dot{\nu}\nu$ Locrian, Lex Gort. vi, 52, $\pi\lambda\bar{\epsilon}\theta\dot{\nu}\nu$ Cretan.

χέλυς presents difficulty. It has a long final in Homeric Hymn to Merc. 33, 153, 242, but a short final in Callim. Hymn to Apollo 16, Oppian H. 5, 404, Aratus 268. It is given as a barytone feminine in short v by Hdn. i, 237, 20. There would be no difficulty in Greek in explaining the long final in the Homeric hymn as due to the same sort of metrical lengthening as seen in a few examples in Homer of a long final in masculine oxytone adjectives in -ix. But it has been plausibly connected (e.g., by Hirt, Ablaut 473; Kretschmer, K.Z. 31 [1892], 335; Wiedemann, B.B. 27 [1902], 249 ff.) with O.B. žely or žily with the same Kretschmer, loc. cit., 386, attempts to explain the $\bar{\nu}$ as meaning. due to contraction of a long root-vowel $(\bar{a}, \bar{e}, \text{ or } \bar{o})$ with u, comparing χελώνη. If this connection with žily is accepted, the word constitutes the sole exception to the statement made above that no Greek noun except the root-nouns can be shown to have an inherited \bar{v} .

B. ADJECTIVES

The adjectives in -vs -ea -v represent the same type (I) that is seen in other languages, but with change in some case-forms, as in the substantives of Class I. While most substantive u-stems have been transferred to the long \bar{u} -declension in Greek, and the declensional Type I of the short u-stems is found in only a few substantives, the u-stem adjectives retain in Greek this type of declension. The only v-stem adjectives (not compounds) not declined after this type are tépus and polius, and these are known only from glosses and might well be substantives used appositively. (See p. 41.) Liddell and Scott give μῶλυς gen. -υος, but this is simply a mistake. There is nothing to show its declension. Adjective compounds with substantives in -vs -v as final member are declined like the simplex. Those with adjectives as final member are declined like the simplex, and consequently belong to the type here under discussion. (See under Compounds, pp. 61 f.)

The masculine and neuter of these adjectives in -vs are declined exactly like the substantives of Class I except in the following particulars: (1) The gen. sg. in good Attic ends in -eos not -ews, though -ews is found in late writers. (2) The nom.-acc. pl. neuter has the open form $-\epsilon a$ in Attic, and not the close form $-\eta$ of the substantives. Attic inscriptions show the gen. ημίσεος, C.I.A. ii, 794, d, 6 (356 B. C.), and the nom.-acc. pl. neuter in -ea or -eaa. century B. C. beside the forms in -ea -ea (Meisterhans, 150). For the late gen. sg. in -ews see Lobeck, Phrynichus 247. correct reason why the Attic adjective had -cos while the substantive had -cos is given by Choroboscus, Gram. Græci iv, 1, 222 (221, g). It is that the presence of the adverb in - $\epsilon \omega s$ to the same adjective led to a desire to keep the gen. sg. of the adjective and the adverbial form distinct. Another explanation is also offered by Chœroboscus, but it is not so plausible.

Inscriptional evidence for the dialects is not very plentiful. Æolic has the gen. sg. γλύκεος, S.G.D.I. 272 = C.I.G. Ins. 68, 10, 13 = Hoffmann, ii, 166, time of the Antonines. Herodian, ii, 710, 9 = Chœroboscus, Dict. 223, 15 declares that the Bœotian

gen. of ταχύς βραδύς was not ταχίος βραδίος (as we should expect from Bœotian ι before a vowel), but he fails to tell us what it was. Arcadian has the nom. pl. neuter θήλεα, Ditt. 3939, 19. Thera has τὰ θήλεια, Cauer 148 C 27. Laconia has τὰ βραδεῖα, Le Bas et Wad. 194 C. Troezen has βαρέα στενάχοντες B.C.H. 24 (1900), 179.

The acc. sg. in -εa instead of -vv is occasionally found. Homer, Il. 6, 291; 9, 72, has εὐρέα πόντον, and εὐρέα κόλπον, Il. 18, 140; 21, 125. Theorr. 20, 8, 44, has ἀδέα. This is simply an extension of the strong grade -ε_f- to a case elsewhere treated as weak. The adjective form is like the Homeric viéa, p. 32.

All simple (i. e., not compounded) adjectives in -vs are oxytone in the masculine and neuter and properispomenon in the feminine except the following: ἡμισυς, θήλυς, μῶλυς, πρέσβυς, τέρυς, φόλυς, and the Epic forms ἐλάχεια, λίγεια, θάλεια, θαμειαί, ταρφειαί.

ήμισυς is in origin a substantive, though, it must be said, of a class usually oxytone (above, pp. 50 f.); μώλυς is known only from glosses. Hesychius has μώλυς; Etym. Mag. s. v. ἀμβλύς has μωλύς. Göttling, Accentlehre 310, considers the barytone accent wrong. $\pi \rho \dot{\epsilon} \sigma \beta v_s$ is not an adjective in the positive. $\tau \dot{\epsilon} \rho v_s$ and policy belong in declension to Class II and are probably substantives in origin (above, p. 57). The positive exacts is not in use but is given by grammarians, e. g., Hdn. i, 237, 12, who remarks on the Homeric ελάχεια. The positive λίγυς is in use, e. g., by Pindar, and the feminine hyera (not hyera) is prescribed by Arcadius 95, 2. The masculine $\theta d\lambda vs$ to $\theta d\lambda va$ is not extant. The masculine ταρφύς is first found in Æsch. Sept. 535. The masculine θαμύς does not occur except in the grammarians, e. g., Bekker, A.G. 563, 8, and Etym. Mag. 75, 15. Aristarchus gives θαμειαί and ταρφειαί, but Pamphilus gives the forms that would conform to the rule, baueiai and rappeiai. So K.B., § 145, ii. On the accent of $\theta \hat{\eta} \lambda \nu s$ see J. Vendryes, Mem. Soc. Ling. 13 (1904), 143.

The Greek adjectives in -vs agree in their oxytone accent with the u-stem adjectives of the related languages (above, p. 18).

The feminine of adjectives in -vs is regularly made in -eus and follows the Greek first (a) declension. The Ionic regularly has

-ea; so almost universally in Herodotus; and this is found beside the other form -εια also on Attic inscriptions especially of the fourth century B. C. (Meisterhans' 40). In Homer the form -εα is rare, -εια being the regular ending. For the forms in Homer see K.B., § 127, 2, anm. 1; for the Ionic see K.B., § 127, 3, and Smyth, Ionic, §§ 506, 219, 419.

The ending -eta is from -efia, i. e., from the strong form of the suffix -ef- + the feminine-forming suffix -ta-, I.E. -ī- (io). See above, p. 18, and Brug., Gr. Gr. § 174. The forms in -ea are from -eta with loss of the second element of the diphthong. Johansson, K.Z. 30 (1890), 404, takes -ea as from -efa and not from -efia; but see above, p. 7. Cf. also Smyth, Ionic 198, and Meisterhans 40.

The precise process by which -effa became -eta is a matter of Brugmann, Gr. Gr. 8, 8, 15, 2, and 8, 51, 1, calls it doubtful, but in his Kurze Gr. § 151, 3, a, and 318, 2, he puts it under epenthesis (i. e., effa > eifa > eia). He is doubtless led to this position by his view of Elean φυγαδείω, etc., which he derives from -nfig, through -nifw, thus explaining the shortening of $\eta \iota$ to $\epsilon \iota$ (Gr. Gr. Nachtrage 573). That epenthesis is the regular process in aff and off, just as in avi, ovi, aff, off (Balvo, etc.) has been generally assumed on the basis of Corinthian άμοις άν, Διδαίς ων, though now contested by Danielsson, I.F. 14 (1903), 375 ff. But even if true, this would prove nothing for eff, since in the case of eve, epf in contrast to ave, etc., there is no epenthesis, but vowel lengthening ($\phi\theta\epsilon\ell\rho\omega$, $\phi\theta\eta\rho\omega$, etc.). For the reason of this difference, see Goidanich, Le Sorti dei gruppi I.E. -nj-, -mj-, -rj-, -lj- nell' ellenismo. On the other hand -eva cannot come by the same process as $\phi\theta\epsilon\ell\rho\omega$ for * $\phi\theta\epsilon\rho\iota\omega$, since $\epsilon\iota$ is a genuine diphthong. There is no difficulty in assuming that -effa remained unchanged until the dropping of f, thus becoming each without any intervening stage. This is made reasonably certain by Bœotian Καρυκεριο, occurring twice, Εφ. Αρχ. 1896, 243, and 1900, 107. The only escape from this conclusion would be to assume that the Bœotian form is from -efio- not -effo-. This is altogether unlikely. As for Elean φυγαδείω, etc., this type need not be for $-\eta \epsilon_{\mu}$, but can be from $-\epsilon_{\Gamma}$ - ϵ_{ν} , with the grade ϵ_{Γ} , which

must in any event be admitted (see Schulze, Q.E. 457 ff. and Solmsen, Untersuchungen 72).

A still different view is advanced by Prellwitz, Gött. gel. Anz., 1886, 762, who thinks that the regular phonetic development for the nom. sg. fem. of adjectives in -υς would have been *σραδεῦα as παιδεύω from *παιδερίω, and cites Delphian τρικτεύαν κηύαν, Cauer² 204, 34 = C.I.A. ii, 545, of the year 380 B. C., as an example of this development. The form τρικτεύαν is certainly puzzling, but the great mass of evidence is against Prellwitz' view. τρικτεύαν seems to be a feminine to a masc. τρίκτευος, perhaps from a form *τρικτεύς (?).

This class of adjectives is much more largely preserved in modern Greek than are the substantives in $-v_5$, -v. The reason is not far to seek. They constituted in classical Greek an important element in the body of adjectives, and there was beside them no large class in ι or η to cause confusion as in the case of substantives. There has been, however, in modern Greek frequent interchange with adjectives in $-v_5$, and on the other hand many oxytone adjectives in $-v_5$ have gone over to those in $-v_5$, perhaps originating in the comparative $-vr\epsilon\rho\sigma_5$, which had gained a wide use, and after which positives in $-v_5$ could be formed. See Hatzidakis, Neugr. Gr. 381; Jannaris Hist. Grk. Gr., §§ 402, 496, 503; Thumb, Neugr. Volkssprache 47, §§ 94, 95.

Suffix -u- adjectives.—With this suffix are formed most of the u-stem adjectives in Greek. For the accent see above, p. 58. Cognates in the related languages are frequent. For βαρύς: Skt. gurű-; ἐλαχύς: Skt. raghű-; εὐρύς: Skt. urű-; ἡδύς: Skt. svādű-; πλατύς: Skt. prthű-; πολύς: Skt. purű- (on the vowel of the root see Brug., Grd. i², 272; J. Schmidt, K.Z. 32 [1893], 382 f.); ωκύς: Skt. āçű-; see above, p. 19.

Other examples are: παχύς: Skt. bahû- "abundant," Lith. bingùs "spirited" (of horses) (cf. Brug., Grd. i², 545; Prellwitz, B.B. 21 [1896], 286); κρατύς: Goth. hardus "hard," O.H.G. hart "hard," Lith. kartùs "bitter;" πραύς <*πρᾶι-υς: Skt. prītā-"beloved," priyā- "dear," Goth. frijōn "love;" ἐὐς has been variously connected with Skt. vasū- "good," Skt. prefix su-"good," and Skt. āyū-"living." The last is given by Collitz, K.Z. 27 (1885), 183, who cites the literature for other views. Cf. also Schulze, Q.E. 33 ff. The etymology of εὐθύς ἰθύς is uncer-

For various views, none convincing, see Bezzenberger, B.B. 4 (1878), 345 ff.; Meringer, Beitrage (Wiener Akad. 125, 1891) 3; Osthoff, Perf. 534; Thurneysen, K.Z. 30 (1890), 352. Wackernagel, K.Z. 30 (1890), 301 f., takes ἀμβλύς as "without strength" from a privative and *βλύς *μαλύς connected with μάλα μάλιστα. For an ancient view see Etym. Mag. 79, 5, where it is derived from $\tau \delta \mu \hat{\omega} \lambda \sigma s$. $\delta a \sigma \hat{v} s$ with its intervocalic σ has presented difficulty, and called forth a variety of explanations. Brugmann, Grd. i², 748, was inclined to accept G. Meyer's view (Alb. Wörterbuch 65) that δασύς was from *dntsu-s, *δατσυ- because of Albanian dent-"make compact, close." In his Gr. Gr. 122 he goes back to J. Schmidt's view (Kritik 51 f.) that *Sahús was changed back to davis in proethnic Greek after *devoos (cf. βένθος: βαθύς) and that afterward δασύς came in for *δενσος. See the literature cited in Gr. Gr. 122 for other views. In the Ber. sächs. G. d. W., 1901, 92 ff. Brugmann rejects all former explanations and suggests that δασύς is from *δατύς = *dntu-s with the change of $\tau \nu$ to $\sigma \nu$ for which he argues. See above, pp. The t in this case is a "root-determinative" and the suffix is -u- not -tu-. This is clear both from the L. denseo to Alb. dent, and from the great infrequency of the suffix -tu- in adjectives.

Suffix -mu- adjectives.—This is probable in δριμύς. For the etymology see Osthoff, Etym. Parerga 164, who derives from *δρισμυς and compares with L. trīs-tis.

Suffix -lu- adjectives.—This is seen in $\theta \hat{\eta} \lambda vs$: Skt. $dh\bar{a}ra$ "sucking," Skt. $\sqrt{dh\bar{a}}$ "suck," Grk. $\theta \eta \lambda \hat{\eta}$. It is not shown for any other Greek adjectives.

Suffix -tu- adjectives.—This is not found except in $\eta\mu\sigma\nu$, and this is without doubt a substantive in origin. See above, pp. 50 ff.

Suffix -gu- adjectives.—For Brugmann's view of ἐγγύς μεσσηγύς see above, p. 54. Breal, Mém. Soc. Ling. 12 (1902), 242, sees in the -γυς of ἐγγύς an old loc. pl. γυσί, from the root γυ seen in γυῖον "limb," but this is not probable.

C. COMPOUNDS

In compounds where the first member is a noun or adjective in $-\nu$, $-\nu$, gen. $-\epsilon$ os $(-\epsilon \omega s)$, the first member always ends in ν , but

in those where the first member is a noun in -vs, -vos the first member sometimes ends in v, but more often in vo, as $i\chi\theta v-\beta\delta\lambda os$ and $i\chi\theta vo'-\beta\rho\omega\tau os$, etc. See K.B., § 340, 7 C, a, 330.

Nearly all compounds in which the final member is a noun or adjective in -vs are adjectives. Some few are nouns, and a few are substantivized adjectives. The accent of the compound adjective is proparoxytone, no matter what the accent or quantity of the final of the simplex. Herodian i, 237, 8, simply says that all compound adjectives in -vs are barytone, citing ἔπηλυς, νέηλυς, πολύδακρυς, μελάνοδρυς. Cf. Etym. Mag. 246, 11, Eustath. 833, and Schol. Ven. ad Catal. v. 271, quoted by Lobeck, Phryn. 533. According to Lobeck, Paral. 252, substantives are generally paroxytone. He cites ἐτυμόδρυς, ἡμερόδρυς, λινόδρυς, φελλόδρυς, χαμαίδρυς, and χαμαιπίτυς. The last is more probably proparoxytone, and he himself cites πρότηθυς and ναρδόσταχυς as substantives. Further, ψευδαμάμαξυς and ψευδατράφαξυς are not paroxytone.

Of the nouns belonging to Class I, only $\pi \epsilon \lambda \epsilon \kappa \nu$, $\pi \hat{\eta} \chi \nu s$, and $\pi \rho \epsilon \sigma \beta \nu s$ are found as the final member in compounds. From $\pi \epsilon \lambda \epsilon \kappa \nu s$ we have only $\epsilon \xi a \pi \epsilon \lambda \epsilon \kappa \nu s$, frequent in Polybius, from $\pi \hat{\eta} \chi \nu s$ over thirty compounds, and from $\pi \rho \epsilon \sigma \beta \nu s$ only $\epsilon \delta \nu s$, Esch. Ag. 78. and $\sigma \iota \mu \mu \rho \epsilon \sigma \beta \nu s$. These compounds, when adjectives, have the masculine and feminine in $\epsilon \nu s$ and the neuter in $\epsilon \nu s$, and are declined like the nouns of Class I. Substantive compounds under this head are rare. A probable example is $\sigma \iota \mu \mu \rho \epsilon \sigma \beta \nu s$. The declension is like that of the simplex.

Compounds with nouns in -vs -v, -vos as final member are formed from ἀμάμαξυς, ἄρκυς, ἀτράφαξυς, βότρυς, γένυς, γῆρυς, δάκρυ, δρῦς, ἰσχύς, ἰχθῦς, κῖκυς, νέκυς, οἰζύς, ὀφρῦς, πίτυς, στάχυς,

¹This and similar statements below do not imply that every word has both forms and all genders. Some appear only as masculine, some as feminine, and many do not show the neuter form, but the type is as represented.

2 K.B., § 149, xi, and § 126, anm. 9, give the genitive in -cos, and say that they are declined like ordinary adjectives in -vs, except that in the nom.-acc. pl. neuter they have the close form in -η, not the open form in -ca. But since in this neuter plural form they agree with the nouns of Class I rather than with the adjectives like γλνκύς, the presumption is that the gen. sg. also had the substantive form -cωs in Attic, unless there is evidence to the contrary, and such I have not been able to find. (The compounds of Class II are declined like nouns of II, not like adjectives; see below.) Hdt. 2, 149, has τετραπήχεος, Polybius 5, 89, 6, has ἀπὸ ἐκκαιδεκαπήχους.... ὁκταπήχους, but neither shows what Attic usage would be. L. and S. give καλλίπηχως, λυκόπηχως, ἐξαπέλεκως, τετράπηχως, and perhaps others, as having the gen. -ως They give ἀγλαόπηχως, πεντάπηχως, ἐκκαιδεκάπηχως as having the gen. -σος — on what grounds, I do not know.

τηθύς, φραστύς, χέλυς. Their declension is like that of the simplex. The adjective compounds have the masculine and feminine in -υς, the neuter in -υ. See footnote 1, p. 62.

Compounds with adjectives in -vs as final member are themselves adjectives, and follow the usual declension of adjectives in -vs -eta -v, except that the feminine in -eta is rare and the form in -vs often does duty both as masculine and feminine. 1017, 35 and 833, quoted by Lobeck, Phryn. 538, takes such forms as ἀμφιδάσεια, ἱπποδάσεια, χαλκοβάρεια (all in use in Homer) as the feminine to adjectives in -vs, and explains the accent by saying that they agree in this with compound adjectives in the masculine, as τραχύς but ἄτραχυς, ὀξύς but κάτοξυς, θήλυς Theophrastus, H. Pl. 3, 13, 6, has ἐπιβαρεῖαν where the Thesaurus would read ἐπιβάρειαν, and for ὀξυγλυκεῖα ῥόα, Pollux 6, 80, the Thesaurus would read ὀξυγλύκεια. The masculine forms in -vs for αμφιδάσεια and iπποδάσεια do not occur (K.B., § 145, ii), and Lobeck, Phryn. 538, takes these feminine forms rather as parallel to μουνογένεια, θεσπιέπεια and similar feminine forms to masculines in -ns. At any rate undoubted instances of the use of the form in -vs as feminine are found, e. g., Theoph. H. Pl. 1, 6, 8, σύνοξυς as feminine.

The following adjectives in -vs are found as the final member of compound adjectives in -vs: ἀμβλύς, βαθύς, βαρύς, βραχύς, γλυκύς, δασύς, δριμύς, εὐθύς, ήδύς, θήλυς, (θρασύς?), ὀξύς, παχύς, πλατύς, πολύς, τραχύς, ώκύς. Eustathius 340, 21, says that oxytone (adjectives) in -vs when compounded give up their accent if they keep the ending -υς, as δριμύς ἄδριμυς, τραχύς ἄτραχυς, but if they keep the accent they change the ending, as ήδὺς ἀηδής, βαρύς άβαρής, βαθὺς άβαθής. This is also the statement of Schol. Ven. ad Catal. v. 271, quoted by Lobeck, Phryn. 533. Lobeck, loc. cit., 539, adds that when adjectives in -vs are compounded with prepositions the ending is retained. Lobeck, loc. cit., 536, suggests as the reason for the use now of -vs now of -ns as the ending the following: "Ego sic judico et statuo, Graecos sub hac conditione terminationem mutasse, si nomen substantivum subjaceret aptum fingendo adjectivo; sin, adjectivi simplicis exitum reliquisse." Lobeck's examples make it plain that he means a

substantive s-stem. This is the opinion also of K.B., § 342, b, γ , 340. The facts bear out Lobeck's view in the main. Aside from the compounds with prepositions, the instances of compounds in -vs where nouns in -vs (-es) of the same period were well established are of doubtful character.

It is evident from the foregoing that a rather close relation between adjectives in -vs and noun stems in -es exists in Greek. This apparent relation was noticed by the ancients. Thus the writer of Etym. Mag. 210 couples βάρος and βαρύς; 213, 15, 16, τάχος ταχύς, βρίθος βριθύς; 233, 53, 54, δάσος δασύς, πάχος παχύς, γλάφος γλαφύς; 396, 17, εὖρος εὐρύς, θράσος θρασύς, κότος κοτύς, ἴππος ὑππύς; 535, 41, κράτος κρατύς, πλάτος πλατύς. Cf. Fick, B.B. 1 (1877), 245 ff., who gives a list of some twenty-five instances of parallel s- and u-stems. Th. Aufrecht, K.Z. 34 (1897), 458, has a few examples of the same parallelism in Sanskrit.

Compounds with a dental stem as final member and nom. sg. in -vs are adjectives or substantivized adjectives. They have the declension of the simplex. Most of them have only the one form in -vs for the masculine and feminine and no neuter form. Where the neuter does occur, it is late. They are: ὀρθόκορυς -υθος, τρίκορυς -υθος, ἔπηλυς, υ -υδος, κάτηλυς -υδος, μέτηλυς -υδος, νέηλυς -υδος, δμηλυς -υδος, σύνηλυς -υδος, σύγκλυς -υδος. For the compounds in -ηλυς no simplex is extant, but the nature of the compound is clear.

The isolated compounds around isolated compounds around isolated compounds around isolated compounds around isolated and would follow the simplex in declension.

Hypocoristics in -w. —There is a considerable class of proper names in -w belonging, so far as they are not foreign names, to the hypocoristic type (Kosenamen). See Fick-Bechtel² 26; Kretschmer, Vaseninschriften 193, 67, 239; Lobeck, Phryn. 436.

The grammarians report a peculiar type of hypocoristics in -ôs, gen. -ú, dat. v. See Bekker, A.G. 1195; 857, 7; Herodian ii, 707, 615, 625, 665, i, 236; K.B., § 136, 4, d. A gen. -vôos is

1 Καινός, -νδος, f. proper name, Hdn. i, 237, probably belongs under hypocoristics. In Strabo Καϊνος ή has the gen. -νος. So also Πάλμνε, -νδος, Hipponax 15, 4, acc.; Πάλμνε, ibid., 30 B. Cf. Hdn. i, 237; Chœroboscus, Bekker, A.G. 1408.

found beside $-\hat{v}$, e. g., $\Delta\epsilon o\nu\hat{v}\delta os$ I.G.A. 494 from Erythrae, beside the form cited by the grammarians. According to the evidence of the inscriptions this type with $-\hat{v}-\hat{v}\delta os$ is late, Meisterhans 139. In earlier times were found only forms of the usual declension as Bostian $\Delta\epsilon\rho\mu\nu$ u, S.G.D.I. 875.

Dental stems with nom. sg. in $-vs.^{1,2}$ —A list of such names is here presented on the ground that this type may have absorbed some u- or \bar{u} -stems, parallel to the absorption of i-stems by nouns in $-i\delta$, though there is much less evidence for such absorption here, and further because of the occasional interchange with u-stem forms, as $\kappa d\rho \nu \nu$, etc. For the compounds see above.

ἀγλύς, -ῦθος, Hdn. i, 238, feminine oxytone in long \bar{v} , but probably a mistake for ἀγνύς; cf. Lentz, ad loc., and Coceroboscus 359 g= Gram. Græci iv, l, p. 232; ἀγνῦθες, Hdn. ii, 763, oxytone in long \bar{v} declined in -θος; δαγύς, -ῦδος Theocr. 2, 110, v. l. δατύς; έμύς, -νδος, $\hat{\eta}$ see Bonitz, Index Arist., Lexicon de spiritibus 217 has έμύς, others ἔμυς, e. g., Theognost. Cramer, Anecd. Ox. ii, 6, 4; κατήρυδες, Hesychius only; κλύδα, Nicander Al. 170; κοκρύδων·ληστῶν· κλεπτῶν, Hesych. only; κόρυς, -υθος. $\hat{\eta}$ Homer; κροκύς, -υδος feminine in short -υ Hdn. i, 237; κῶμυς, -ῦθος, ibid., πηλαμύς, -υδος, ibid., feminine in short -υ; σμινύδας Pollux x, 173, on the basis of this form and Hesychian σμινύη· δικέλλαν and σμινύης· σμινύη, Lobeck, Phryn. 302, and the Thesaurus give the form σμινύς, -υδος; χηραμύς, -υδος v. l. in Hippocr. and Strabo for χηραμίς, -ιδος, $\hat{\eta}$; χλαμύς, -υδος, feminine in short -υ, Hdn. i, 237.

Instances of interchange between u-stems and dental stems are: κόρυν for κόρυθα, Il. 13, 132; 16, 215; χλάμυν for χλάμυδα, Sappho 64; ἀμαμάξυδες for ἀμαμάξυες, Sappho (Etym. Mag. 77, 1).

Other stems (not dental) with forms similar to u-stem forms are: κίνδυνι, dat. sg. Sappho, Fr. 161 (cf. Etym. Mag. 574, 42), as if from κίνδυς; Μόσσυς, nomen propr., pl. Μόσσυνς and Μόσσυνι, see Lobeck, Paral. 138; φόρκυς, ὅρκυς and the nomen propr. Γόρτυς have the gen. sg. in -υνος; the nom. sg. Τίρυς for the more usual Τίρυνς has the gen. sg. Τίρυνθος; Hesychius has βρέκυν τὸν βρέκυντα; μάρτυς has gen. sg. μάρτυρος.



 $^{^1}$ iργότρως, Heysch, only, is placed by Lobeck, Paral. 254, alongside έπηλως, etc.; on what grounds I do not know.

² iβνε, Hesych, only, is thought to have the gen. -νδοε because of the Hesychian gloss, iβνδήνας · τοὺς εὐφημοῦντας, iβὺς γὰρ ἡ εὐφημία.

NOTES IN EXPLANATION OF THE WORD-LISTS, ETC.

The lists of *u*-stems here presented will no doubt require addition and correction, but are believed as they stand to be reasonably complete. They do not include:

- (1) Foreign words. E. g., Hesychius gives δβαρύ and δρφύς as Macedonian, ἄγλυ and καραρύςς as Scythian (καραρύςς οἱ Σκυθικοὶ οἶκοι), ἰβύ and μωύς as Lydian, λίλυ as Libyan; Plutarch gives λάβρυς as Lydian for πέλεκυς, and Clem. Alex. gives βέδυ as Phrygian for ὕδωρ. The Thesaurus gives μακρύς as a forma graecobarbara for μακρύς.
- (2) Obvious figments. E. g., ἀχύς is set up by Etym. Mag. 182, 1, as an intermediate form between ἀχος and ἀχνύς. The scholiast on II. 18, 521 coins ἢπυς and βρίηπυς to account for βριήπυς, an σ-stem. But cf. Schulze, Q.E. 337, on ἢπυς, and see his list for other possible u-stems. Etym. Mag. 430, 20 coins ἴσυς to go with ἡμισυς, and 626, 51 ἐσύς in explaining δέψς. The grammarians also cite μικύς and μινύς. Bekker, A.G. 1096, has φύς to explain ὀσφύς. Cramer, Anecd. Ox. has νέκικυς as the form from which νέκις is derived. Perhaps δίκτυ (p. 43) should be classed here, as well as γλαφύς adj. Etym. Mag. 233, 54.
- (3) Mere dialectic variants like γισχύν ισχύν, Hesych., βίσχυν or βισχύν ισχύν Hesych. and Bekker, A.G.; βάδύς, Elean for ήδύς in Pausanias; βροδόπάχυς, Sappho 65.
- (4) Forms set up without good reason. Such are: δένδρν- (see p. 27), γένν cited by Passow but not found (see Lobeck, Paral. 254), οἰσύς σιπύς and perhaps σμινύς (but see p. 65, a dental stem) set up by Lobeck, Phryn. 302, and κῶῦ, see p. 27.
- (5) Indeclinable exclamations, cries, etc. Such are: &, μν οι μῦ, κόκκῦ, κνῦ τὸ ἐλάχιστον, Hesych., cf. Danielsson, Studien i, 54; γρῦ, ὁ ὑπὸ τῷ ὅνυχι ῥύπος, ἢδη δὲ καὶ τὸ ἐλάχιστον, Hesych., cf. Danielsson, loc. cit., Kretschmer, K.Z. 31 (1892), 342, Meringer, Beiträge (Wiener Akad. 125) 16; ἄρρυ ἐπίφθεγμα κωπηλατικόν, Hesych.
- (6) Mere errors. Some probable errors are given in the lists, but the following are not there cited: τριπτύς, p. 48; αὐτό-ηδυ, v. l. in Aristotle, Top. 6, 8, 7, but not now read; ἐλευτύν ἔλαιον, Heeych., for ἐλεητύν ἔλαιον; δορατοπαχύς, ἐτεροπαχύς, νευροπαχύς, δορυθρασύς, εὐθαρσύς, the last in Etym. Mag., s. v. ἀτρεκής, are shown to be wrong forms for δορατοπαχής, etc., by Lobeck, Phryn. 535; cf. above, p. 63.
- (7) Proper names. Here 'Epuv's is an exception, and there are some other words cited only by grammarians about which I am in doubt. These are included in the lists.

(8) Adverbs. εγγύς and its compounds were admitted to the lists as having adjectival forms outside the positive. Other adverbs which are probable evidence for u-stems are: πρόχνυ to γόνυ (cf. Brug., Gr. Gr. 571, 108); ἀντικρύ (ἀντικρύς) (Attic inscriptions ἀπαντροκύ and καταντροκύ, Meisterhans 81) connected by Meringer, Beiträge (Wiener Akad. 125) 16, and Bréal, Mém. Soc. Ling. 12 (1902), 243, with the words for "horn, head," Grk. κόρας, L. cornū, etc.

There are other adverbs in -vs or -v or -v, but these are either from original pronominal stems in v like Rhod. $\delta\pi\bar{v}s$, Brug., Gr. Gr. 49, Grd. i², 183, or are after the analogy of such stems, or else have a particle v added as in $\pi\acute{a}vv$ $\pi\acute{a}\gamma\chi v$, Brug., Gr. Gr. 257. See lists in Hdn. i, 506, 18; Bekker, A.G. 1341; Brugmann, loc. cit., and cf. also $\acute{a}\mu\acute{v}s$ · $\acute{b}\mu\acute{o}i$ $\sigma\acute{v}v$ $\acute{a}\acute{v}r\acute{\varphi}$, Hesych., $\tau v\tau v$ î Cretan, Mon. Ant. iii, n. 13 (an uncertain word, Searles, Lex. Stud.), and $\pi\lambda\acute{v}v$ L.G. xi, 23. For Æolic forms in -v see Hoffmann, G.D. ii, 426.

With the exceptions above noted and allowing for possible oversight, this collection includes all the u-stems cited in Liddell and Scott, in numerous indices, and in Hesychius. It also aims to include the dialectic and epigraphical material up to 1904. All words in the Collitz Sammlung, including the recent Cretan number, have been collected, and this material has been supplemented from the indices of the various volumes of the Corpus, the indices of Dittenberger Sylloge², Kern Inschr. v. Magn., from reading the inscriptions published in the chief epigraphical journals of recent years, from Miss Searles' Lexicographical Study of Greek Inscriptions, and from Herwerden's Lexicon Graecum Suppl. et Dialecticum 1902. I also consulted the chief papyrus publications, but the results here were barren. Gradenwitz, Einführung in die Papyruskunde (Leipzig, 1900), cites a form οψύς from the Berlin papyri, but it is not to be found in the place cited.

In general no attempt is made to give the author or period, but for rare words (except compounds), especially ἄπαξ λεγόμενα, the source is given. The use of a name after a word with no remark implies that the word is found only in that writer. (I have relied on the Thesaurus for citations, and where it has erred, I have erred with it.) Words which rest solely on emendation are

¹ For the words in Liddell and Scott I have had access to the lists according to suffix prepared by the late Dr. W. A. Stratton for his projected history of Greek noun-formation. These lists have, by the courtesy of Mrs. Stratton, been left in the care of Professor Buck.

underlined. Words not found in the Thesaurus are marked with a dagger. Where glosses indicate dialect, this is given.

The order of arrangement is by suffix, i. e., in alphabetical order according to the ending, except that compounds under a simplex are in the *usual* alphabetical order. Figures immediately after a word refer to pages of this dissertation. Only those places considered most important are thus referred to, and the index is not intended to be complete in this respect.

WORD-LISTS

A. NOUNS IN -US -U, -eos (-ews) WITH THEIR COMPOUNDS

δυοκαιεικοσίπηχυς

iσόπρεσβυς Æsch. Ag. 78 σύμπρεσβυς vivs 29-35 † #édeku 41, Hesych. πέλεκυς 41, 27 f. dfanédenus έγχελυς 27, 54 your 35 f. gen. - Fos, not -cos δόρυ 35 f. gen. - cos, not -cos σώρυ 28 μίσυ 28, more probably under -NC -NOC ăστυ 44, 50 πήχυς 41 ἀγλαόπηχυς άργυρόπηχυς δεκάπηχυς δίπηχυς

πρίσβυς 54, 27 f.

δωδεκάπηχυς ΟΓ δυωδεκάπηχυς είκοσίπηχυς είνάπηχυς = έννεάπηχυς ἀκκαιδεκάπηχυς ἀκπηχυς = ἀξάπηχυς **ἐλ**εφα*ντόπη*χυς ἐνδεκάπηχυς ἐνενηκοντάπηχυς έννεάπηχυς - είνάπηχυς έξάπηχυς = ἐκπηχυς ἐξηκοντάπηχυς ἐπίπηχυς δατάπηχυς evanxus **ἰσόπηχυς** καλλίπηχυς λευκόπηχυς ὸγδοηκοντάπηχυς

ὀκτωκαιδεκάπηχυς δατώπηχυς ΟΓ δατέπηχυς παράπηχυ · iμάτιον Hesych., Pollux παράπηχυς πεντάπηχυς πεντεκαιδεκάπηχυς πεντηκοντάπηχυς πολύπηχυς ροδόπηχυς τεσσαρακοντάπηχυς τετράπηχυς τριακονταπεντάπηχυς τριακοντάπηχυς τριημίπηχυς TOÍWWYVE τρισκαιδεκάπηχυς †χρυσόπὰχυς Bacchyl. ∇, 40

δλολυς δ

B. NOUNS IN -US -U, -VOS WITH THEIR COMPOUNDS 1

ίβυς · εὐφημία, στιγμή Hosych. κόρθυς Theocr. Perhaps gen. -vees 65, footnote 2 λίβυσς των δφεών τινες Hesych. et al. φόρβυ · τὰ οὖλα. 'Ηλεῖοι Hesych. στλεγγύς 55, Theophr. H. Pl. 8, 4, 3 †ληγύς Cram. An. Ox. 11, 303, 11. άγδυς · άγγος. Κρητικόν Ηοσγοί. νέκυς 42 νηδύς 55 † òibús Cram. An. Ox. II, 303, 11 γοιδύες · ρυτήρες Hesych. Same σικύς · ο γναφεύς Hesych. as preceding? Cf. γισχύν· κόκκυς · λόφος Hesych. ίσχύν rávôvs ò κόνδυ κόρδυς · πανούργος Hesych. δίζύς 53 (ωίζύς Hesych.) πάνοιζυς Æsch. Cho. 49 Etym. Gud. βράθυ µ400 42, 18 γήθυ = γήθυον πληθύς 56 iθύς 56, Homer

†τρίσοιζυς Etym. Mag. and άναβλύες πηγαί Hesych.

†θριθύς · δ ίσχυρός Cram. An. Ox. II, 303, 11.

1 μῦς original s-stem, 55, footnote.

ίχθῦς ὁ 55 άνιχθυς ἀπιχθυς (ἀπιχθύς) εύιχθυς κάλλιχθυς πολύῖχθυς φίλιχθυς βέλεκυς · δσπριόν τι . . . Hesych. kîkve 42 åKLKVE aprus 42

πολύαρκυς Oppian Cyn. 4, 10 μίμαρκυς Aristoph. Athen., etc. κέρκυ unintelligible gloss, yéves 42 Hesych.

ãλυς χέλυς 56

χρυσόχελυς C.I.G. 5089, 1 έγχελυς 27 (cf. -υς, -εος) ίλύς (είλύς) 55

κοίλυ · τὸ καλόν 42, Hesych. έλλυες · ζώα ἐν ποταμή Hesych. σκόλλυς δ

μόλυς Hdn. II, 938, 17 tarohi · Sainer à Ovoia. Cerres ομφακες Hesych., but out of alphabetical order and very doubtful άχλύς 58 μῶλυ (*pipus Aristotle ap. Athen. 305d (χρέμυς · δ δνίσκος ίχθῦς Hesych. κλεμμύς Anton. Lib., c. 32 dárves · érédpas Hosych., mistake for epárves espai Schmidt iyrús 58 λιγνύς 53 ἀμφίγενυς · ἀξίνη Hesych. μακρόγενυς Adamant. Phys. 396 μικρόγενυς Adamant. Phys. 2, 17 dévyerus Pollux 2, 97 χαλκόγενυς Pind. Pyth. 4 έλινύες Etym. Mag. and Polybius

'Ερινύς nomen propr. θρήνυς δ 53

τρηνυ Cram. An. Ox. II, 120, 34 βαρύδακρυς (κάχρυ γλυκύδακρυς †κύνυ· πίεσμα, τὸ ἀπὸ στεμφύλων λεέχρυς 53 ποτόν. Κύπριοι Hesych. érdakpes σώρν (888 -ν, -εος) άχνύς · ἡ λύπη Etym. Mag. 182, 1 ἐπίδακρυς Suidasand Hesych. μίσυ (cf. also -υ, -εος) άμάμαξυς ή **ἐτοιμόδακρυς** တပ်န (စီန) ψευδαμάμαξυς ὁ Arist. Vesp. †iepóčanpus Athen. 14, 651 f. παράδακου Diosc. 4, 124 326 θατύς · θεωρία 49, Hesych. ἀτράφαξυς περίδακρυς iares · Bepareia Hosych. ψευδατράφαξυς Arist. Eq. 680 ποικιλόδακρυς πλάτυς Hesych., error for πλάitúe πολύδακρυς THE ? κάπυς · πνεύμα, κήπος Hesych. σύνδακρυι βλέτυες · αὶ βδέλλαι Hosych. **หลิสบ = ฮโหทุสบ** †συντομόδακους Tzotz. (L.&S.) † éperés 48 (1) Mon. Ant. III, 67 parus (papus), see Athen. 3895 ταχύδακρυς Lucian, Navig., δργητύς · δργή Hesych. dontús c. 2 **GÍYNEU** άρπυν · έρωτα. Δίολεῖς 42, Ηθὑπόδακρυς Hesych. s. v. γλαμνἀφτύς · ἀγαθότης Hesych. sych., Etym. Mag. 148, 83 ρόν dhenrús φιλόδακρυς ποθητύς Oppian C. 2, 609 (Parthenius) βαρύ · θυμιαμάτιόν τι εὐῶδες Bokάμμακρύ · τὸ ἀπαρχῆς — Hosych. άλητύς ker, A.G. 225, 16 άλαλητύς öpvs Hdt. 4, 192 βαρύες · δένδρα Hesych. βόρυς Hdt. 4, 192 βαλλητύς Hesych, and Athen. δρ**υ̂**ς 55 καρορύς · ΰδρα, Κρητε(ς) Hesych. άβολητύς Bokker, A.G. 322, 9 δωμητύς · κατασκευή Hosych. 48pvs Pindar, Fr. 23, 126 φόρυς · δακτύλιος ὁ κατὰ τὴν ἔδραν tyepávőpues ai makatal őpúes Hesych. βοητύς Od. 1, 389 Незусh. ἐπητύς Homer, Suidas βότρυς δ 53 ἐνάλιδρυς, see Lobeck, Paral. άγλαόβοτρυς Nonn. Dion. 18, 4 άγορητύς Od. 8, 168 252 ώρητύς · πήρωσις Hesych. ἐλίβοτρυς · ἀμπελός τις μέλαινα έτυμόδρυς Theophr. H. Pl. 8, Hesych. πωρητύς 8, 2, and Hesych. σύβοτρυς †ποτητών · τὸ πίνειν Hesych. ημερόδρυς · είδος δρυός Hesych. καλλίβοτρυς Soph. Oed. Col. ἀντιμαχητύς (ἀντιμαχηστύς) λινόδρυς Eratosth. φελλόδρυς μικρόβοτρυς Heeych. s. v. μι- ίτυς 50 χαμαίδρυς κρόρ(ρ)ωξ dautés Homer χίδρυ · δνομα δειλόν Hesych. ποικιλόβοτρυς Nonn. Dion. 5, κλιτύς (κλειτύς) 44 μελάνδρυς δ 279 μίτυς 43, Aristotle, H.A. 9, 40, 10 γέρυς · γέρων Hesych. πολύβοτρυς mirus 44 βήρυς · ίχθῦς Hesych. ήμερόπιτυς Hesych. s. v. μήφερέβοτρυς Nonn. Dion. 19, 53 yapus, 42 φιλόβοτρυς Kures, acct. - mirus βροτόγηρυς Anth. Pal. 9, 562 έργότρυς · κατάσκοπος έργων Ηοχαμαίπιτυς έρίγηρυς · μεγαλόφωνος Ηθsych. φίτυ 43 sych. φέρτρυς · δθλον, Θούριοι Hesych. φίτυς 43 άρπακτύς Callim. Apoll. 94 εύγηρυς μάστρυς Photius s.v. ματρυλείον καλόγηρυς Suidas s. v. κρήδστρυς 1 Theophr. and Pliny πρακτύς Etym. Mag. 316, 34 δφρ**ῦς 5**5 TETPERTÚS μειλιχόγηρυς Tyrt. 8, 8 drtoppus · Botáres elbos Ho-†τακτύς 2 sych. ρυστακτύς Homer, Eustath. μελίγηρυς topentús · (opefis) Hosych. ποικιλόγαρυς Pind. Ol. 3, 12 δάσοφρυς Adamant. Phys. τετράγηρυς εὔοφρυς intés einés Cram. An. Oz. II, 16, 2 τονθρύς · φωνή Hesych. κατόφρυς δθρυν. Κρήτες τὸ όρος Hesych. guávodous Theory. δίατυ 43, Etym. Mag. 275, 25 δάκρυ 58 f. λεύκοφρυς Sixrus 48, Hdt. 4, 192 άδακρυς λύκοφρυς Diosc. Noth. 8, 117 eneuris onověý Hesych. åκριτόδακρυς μελάνοφρυς Hesych, et al. τρικτύς == τριττύς 49 θελκτύς 48, Apoll. Rh. I, 575 ἀναγκόδακρυς μίξοφρυς άπειρόδακρυς Æsch. Suppl. 75 † ἐπισμυκτύν · ἐπιμυκτηρισμόν 48 σύνοφους ἀρίδακρυς ὑπέροφρυς Hesych. ἀρτίδακρυς διωκτύς Callim. Dian. 194 χρύσοφρυς

¹ οίστρύς Lobeck, Phryn. 302, a mistake for δστρυς ?

²Quoted by Brugmann, Ber. sachs. G. d. W., 1901, 95, but I have not been able to find occurrence.

γλάφυ Hesiod. Op. 533, He-†φλεγμαντύς v. l. in Hippocr. μνηστύς Homer δειπνηστύν · τὴν τοῦ δείπνου ὧραι 8, 96 sych. †άμφαντύς 48, Lex Gort. XI, λα[ι]φύς · δάπανος ή βορός Ηθ-Hesych. 21, 22 δρχηστύς sych. merracorrés (1) Schol. Od. 3, 7 Apioris Hdt. 5, 6 νάφυ (800 νάπυ) δτρυντύς Homer and glosses σωφρονιστύς Plato, Legg. 933, e δελφύς 56 όλόφυς · οἶκτος. ἔλεος Ηθκιθαριστύς χαλεπτύς ' χαλεπότης Hosych. δαριστύς Homer, Hesych. sych. μάρπτυς · ὑβριστής Hesych. δσφύς κτιστίς Hdt. 9, 97 †rυφύε Cram. An. Ox. ΙΙ, 284, 6, άρτύς · σύνταξις, φιλία . . . άκοντιστύς Il. 23, 622 Hesych. †άποκοντιστύς 2 nomen propr.? ἀποδαστύς · ἀπομερισμός Hesych. ξιφιστύς · μαχαιρομαχία στράχυς late for στάχυς χραμβαλιαστύς · γέλως δ μετά Hesych. στάχυς ὸ, and ἄσταχυς ὸ παιδιάς Hesych. (κρ. L. χιλιοστύς 48 ἀγάσταχυς & S.) πεντεχιλιοστύς Bool. εύσταχυς κρεμβαλιαστύς Homeric Hymn μυριοστύς 48 καλλίσταχυς Apoll. 162 негтаковновтіє 48, Etym. Mag. πολοβόσταχυς Dioec. χιλιαστύς 48 (= χιλιοστύς) μικρόσταχυς (?) TENTIKOGTÍS 48 γελαστύς Callim, Del. 329 έκατοστύς 48 μυριόσταχυς καταπλαστύς Hdt. 4, 75 τωνστύς Od. 21, 112 ναρδόσταχυς μαστύς Callim. Fr. 277 †ômuorús 48, S.G.D.I. 4971 πολύσταχυς άπαστύς · άπαστία Etym. Mag. καττύς 43 φερέσταχυς κόχυ πολύ, πλήθος Hesych., 118, 50 τριττύς **49** άσπαστύς Callim. Fr. 427 μόττυες · οἱ ἔ[γ]κλυτοι καὶ παρειsubst.(?) φραστύς σκόψις, έννοια άσχυ Hdt. 4, 28, Cram. An. Ox. μένοι 43, Hesych. Hesych. tòiorevrés Callim. Apoll. 42 II, 79, 120 έφραστύς poet ap. Suidas άλαωτύς Homer, Hesych. ίσχύς decerrir · την αιώνιον οὐσίαν δωτύς Suidas άνισχυς . . . Hesych. αὐτοϊσχύς ζωτύς · θώραξ 48, Hesych., per-†áxeorús l haps for Sworis? μῶῦ · τὸ ὕδωρ Hesych., probἀπεστύς · ἀποχώρησις Hesych. βρωτύς ably foreign

C. ADJECTIVES IN -US -V, -605 WITH THEIR COMPOUNDS

modús 60 γλυκύς φιλόθηλυς ταθς · μέγας. πολύς Hesych., ἐπίγλυκυς Theophr. H. Pl. & εἰλύ · μέλαν Hesych. from *tneu-e, √ ten 18, 10 πολύς 60, 19 "stretch" δξύγλυκυ ἀπολυς πρέσβυς not adj. in positive. περίγλυκυς Ælian N. A. 15, 7 πάμπολυς See nouns in -vs, -cos υπόγλυκυς Athen. 14, 625α ὑπέρπολυς dyyús adv. 61 φιλόνλυκυς φόλυς 41, 57, decl. in -υος πάρεγγυς adv. ώκύs **6**0, 19 μώλυς · ὁ ἀμαθής 57, Hesych. σύνεγγυς adv. †iwww.cvs Baochyl. 11, 101 μωλύς Etym. Mag., s. v. λιγύς 58 †ποδώκυς = ποδώκης **ἀμβλύς** βραδύς άμβλίς 61 άμωλός Etym. Mag., loc. cit. ₹0s 80 ὑπαμβλύς, see Lobeck, Phryn. θαμύς 58 ກູ້ອີບ໌ຣ 60, 19 539 δριμύς 61 άδριμυς Eustath. 276, 2 ὺπ έρηδυς θηλυς 61 Battie abulus Plutarch ὑπέρδριμυς Schol. Luc. D. D. άβαθύς error for άβαθής, 800 ἀνδρόθηλυς 7, 8 Lobeck, Phryn. 584 άρσενόθηλυς ύπόδριμυς Galen προβαθύς ημίθηλυς Carm. Anacr. 13, 2 μάνυ · πικρόν, 'Αθαμάνες Hesych. เชิบ์ร 800 สมัติบ์ร μιξόθηλυς εὖνυν · ἐστερημένον Hesych., βριθύς πάνθηλυς Etym. Mag. prob. error for ever · εύθύς 60 f. παράθηλυς (?)3 èÉús μεσευθύς Clem. Alex. ὑπόθηλυς Aristoph. Frag. drožve

¹Cited by Pape, Etym. Wörterbuch, as poetic and = "Heilung," but I have not found its occurrence.

² Given by Brugmann, Gr. Gr.³, § 220, a mistake for ἐκοντιστύς?

Thesaurus s. v. warbadus cites wapabadus from Hesychius, but I do not find it.

exofus irdasus Diosc. βραχύς ėπίδασυ Theophr. KÁTOĚVS ἀμφίβραχυς πάροξυς issédaces only in fem. Hom. δίβραχυς ὑπέρδασυς σύνοξυς έμβραχυ adv. èξάβραχυς ὑπέροξυς θρασύς (θαρσύς) **v**actus ημισυς 50 ff. έπιβραχύ ΟΓ έπὶ βραχύ (?) aimús πλατύς "salty" ψμίβραχυς πλατύς "broad," 60, 19 βαρύς 60, 19 καταβραχύς ΟΓ κατά βραχύ (?) άβαρύς error for άβαρής, see ἐπίπλατυς (cf. ἐπιπλατής) πεντάβραχυς Lobeck, Phryn. 536 iσόπλατυς (cf. -τής) πολύβραχυς ἐπίβαρυς καταπλατύς Trots. Hist. 11, τετράβραχυς περίβαρυς 857 τρίβραχυς ὑπέρβαρυς (cf. ὑπερβαρής) ὑπόπλατυς ύπόβρεχυ adv. χαλκόβαρυς only in fem. Hom. κρατύς 60 τρᾶχύς χαλκοβάρεια (see Lobeck, βριτό γλυκό. Κρήτες Hesych. arpagus Eustath. 840, 21 Phryn. 588) κοτύς Etym. Mag. s. v. ἀμβλύς έντραχυς ὑπότραχυς άμαρύς · άπλετος. πολύς Hesych. †γλαφύς Etym. Mag. 283, 54 τέρυς 41, 57, decl. in -νος ταρφύς 58 στραχύ · τραχύ Hesych. **r**vpvs 60, 19 άλαχός 58, 60, 19 ταχύς δασύς 61 παχύς 60 κοχύ · πολύ, πλήρες Hesych. adj. ἀμφίδασυς only in fem. Hom. **ὑπέρπαχυς** or subst.? Cf. nouns n άμφιδάσεια (cf. χαλκόβαρυς) ὑπόπαχυς -vc, -voc.

ADDENDA

From Herwerden's Appendix Lexici Graeci Suppletorii et Dialectici, I add twc uncertain examples:

βλαδύς mollis, tardus. Hippocr. de aere cap. 20. This represents an emendation, βλαδία in place of πλατία, which is not accepted in the new edition of Hippocrates by Kühlewein See Vol. II, p. vi.

τιτύς Cretan = τίσιε, ζημία, S.G.D.I. 4976 τᾶς τιτύρος. This is uncertain, the inscription being a mere fragment, but probable enough to have deserved mention above.

1

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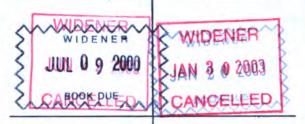




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